

6.3.2 Radiated Emissions 15.209/15.205

Radiated emissions were performed on the Intersil PRISM II over the frequency range of 30MHz-25GHz. The transmit frequency was 2.437GHz (or channel 6).

Data plots are presented in three groups:

Data Sheets 6.3.2-1 and 6.3.2-6 30MHz-1GHz Quasi Peak Detector

Data Sheets 6.3.2-7 - 6.3.2-12 1GHz-25GHz Peak Plots (1MHz-RBW, 1MHz-VBW)

Data Sheets 6.3.2-13 - 6.3.2-24 1G-25GHz Average Plots (1MHz-RBW, 10Hz-VBW)

6.3.3 Peak Ambient (EUT Off/Support Equipment "On")

Peak and average ambient data is used to compare the peak EUT data to the environmental ambient and determine true EUT signals. The tester uses a more detailed procedure to analyze signals by investigating frequency bands of 25MHz to 50MHz. The ambient is displayed and saved on the analyzer screen. The unit is then turned on and the true EUT signals are maximized. Data plots are presented in three groups:

Data Sheets 6.3.3-1 and 6.3.3-6 30MHz-1GHz Quasi Peak Ambient

Data Sheets 6.3.3-7 - 6.3.3-12 1GHz-25GHz Peak Ambient Plots (1MHz-RBW, 1MHz-VBW)

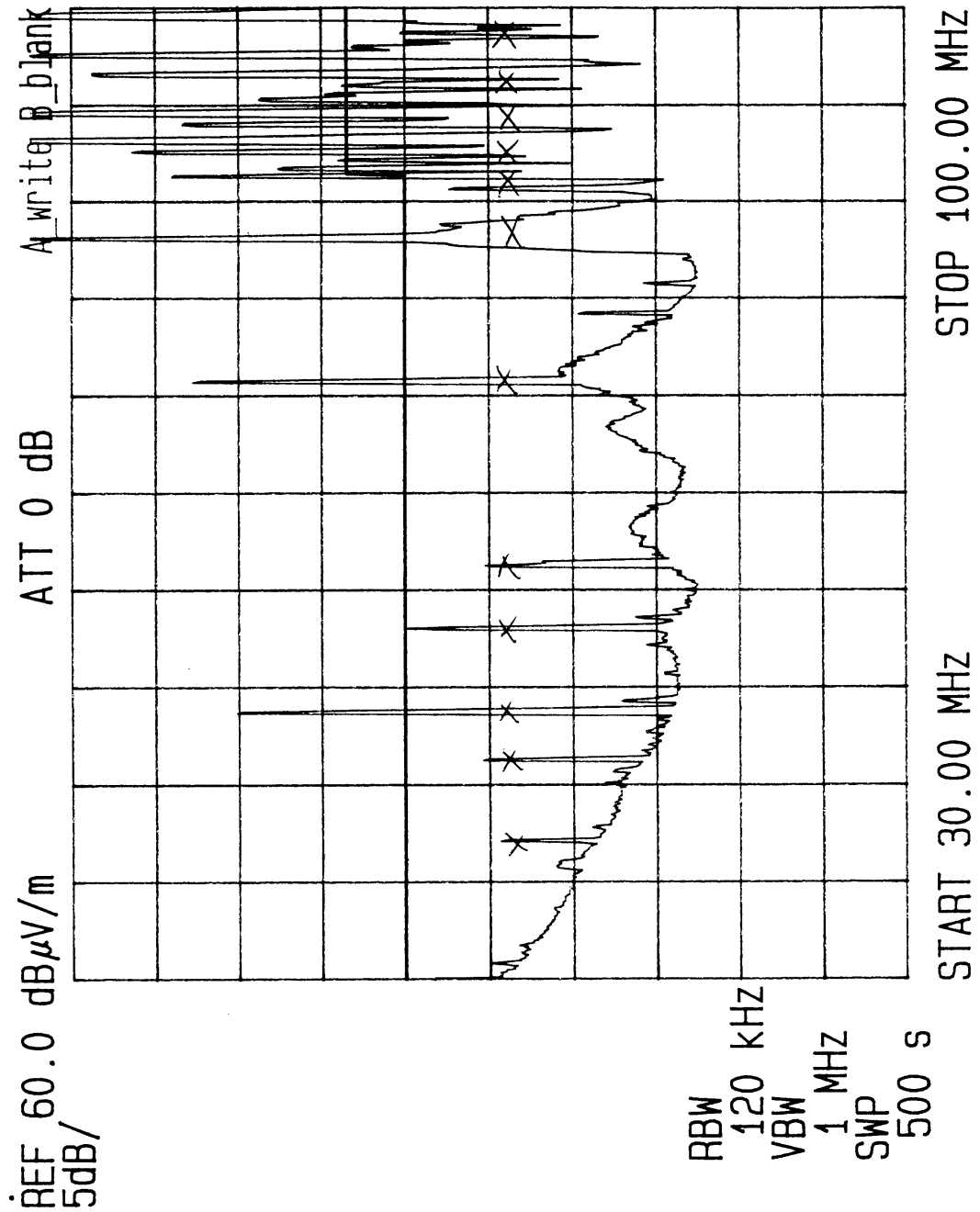
Data Sheets 6.3.3-13 - 6.3.3-24 1G-25GHz Average Ambient Plots (1MHz-RBW, 10Hz-VBW)

The following is a tabulated listing of the signals detected during the radiated testing. Calculation of field strength is described in Paragraph 6.1 of this document.

<u>Freq. (GHz)</u>	<u>Measured Level</u>	<u>Spec. Req.</u>	<u>Margin</u>	<u>Polarity</u>	<u>Restricted Band</u>
4.874	63.5 Peak	74	-10.5	H	Y
4.874	63.0 Peak	74	-11.0	V	Y
4.874	45.0 Avg.	54	-9.0	V	Y
7.32	66.5 Peak	74	-7.5	V	Y
7.32	49.0 Avg.	54	-5.0	V	Y
7.32	49.0 Avg.	54	-5.0	V	Y



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 30M-100MHz	SPEC: 15.247	ANT.HT/POL: 1.5 m H
DETECTOR: QUASI PEAK	LINE UNDER TEST: N/A	EUT POSITION: 180
DATE: 9-27-99	TEST SITE: 3 METER	TESTER: <i>AB</i>

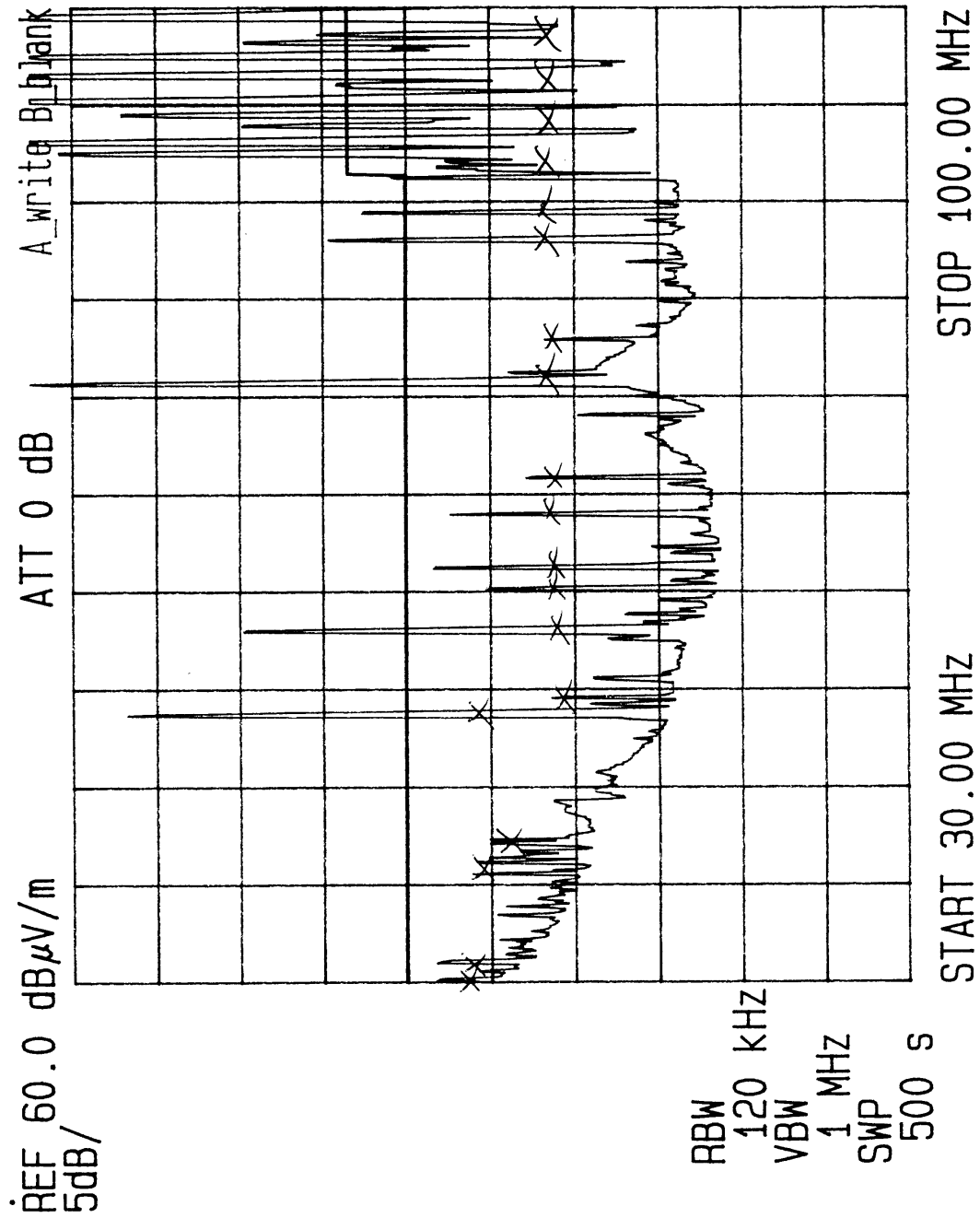


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DATA SHEET 6.3.2-1



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 30M-100MHZ	SPEC: 15.247	ANT.HT/POL: 1.75m V
DETECTOR: QUASI PEAK	LINE UNDER TEST: N/A	EUT POSITION: 180°
DATE: 9-27-99	TEST SITE: 3 METER	TESTER: <i>AB</i>



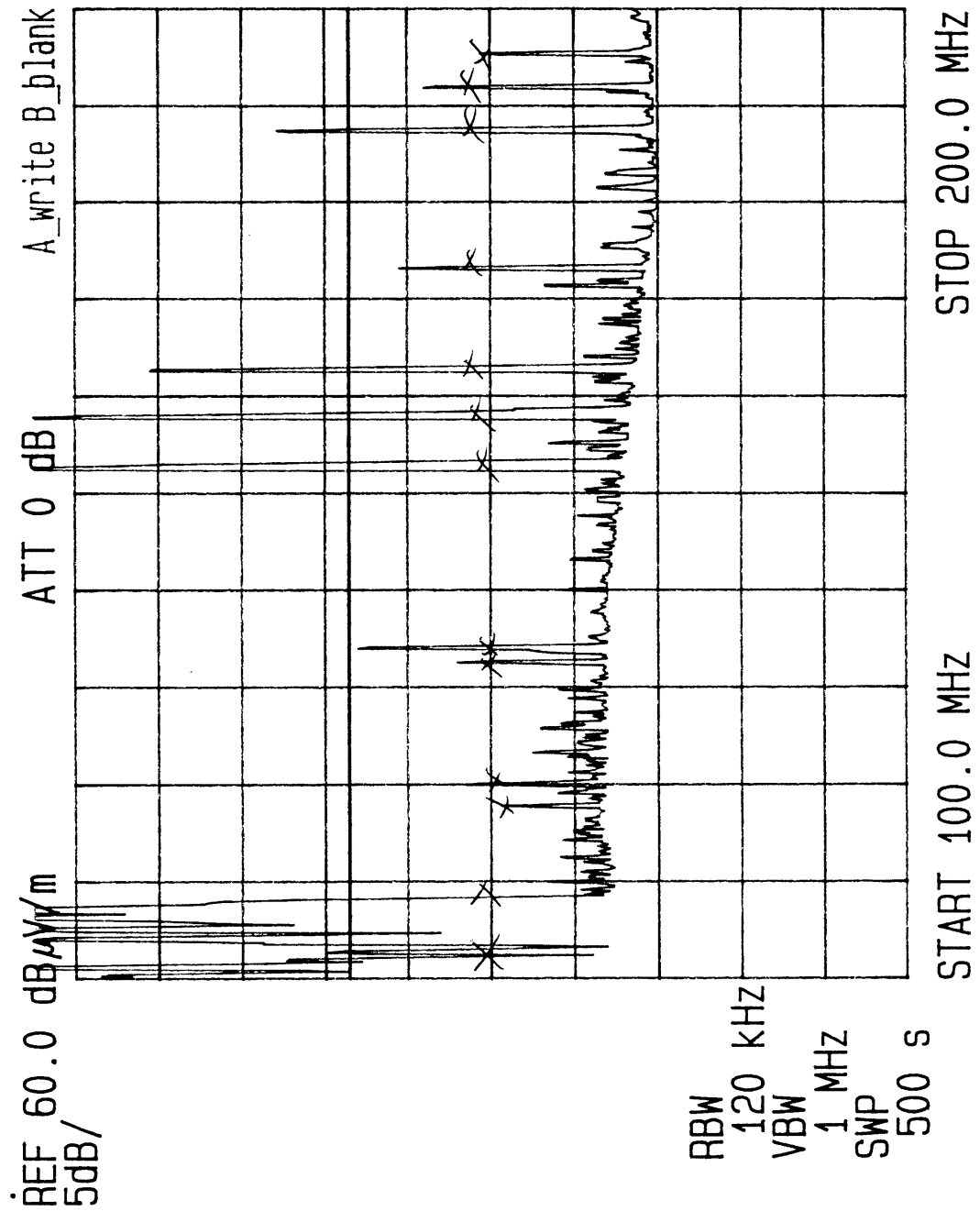
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DATA SHEET 6.3.2-2



TEST: FCC RADIATED EUT: Intersil PRISM II S/N: 9936-0027
FREQ: 100M-200MHZ SPEC: 15.247 ANT.HT/POL: 1.75m V
DETECTOR: QUASI PEAK LINE UNDER TEST: N/A EUT POSITION: 180
DATE: 9-27-99 TEST SITE: 3 METER TESTER: AB

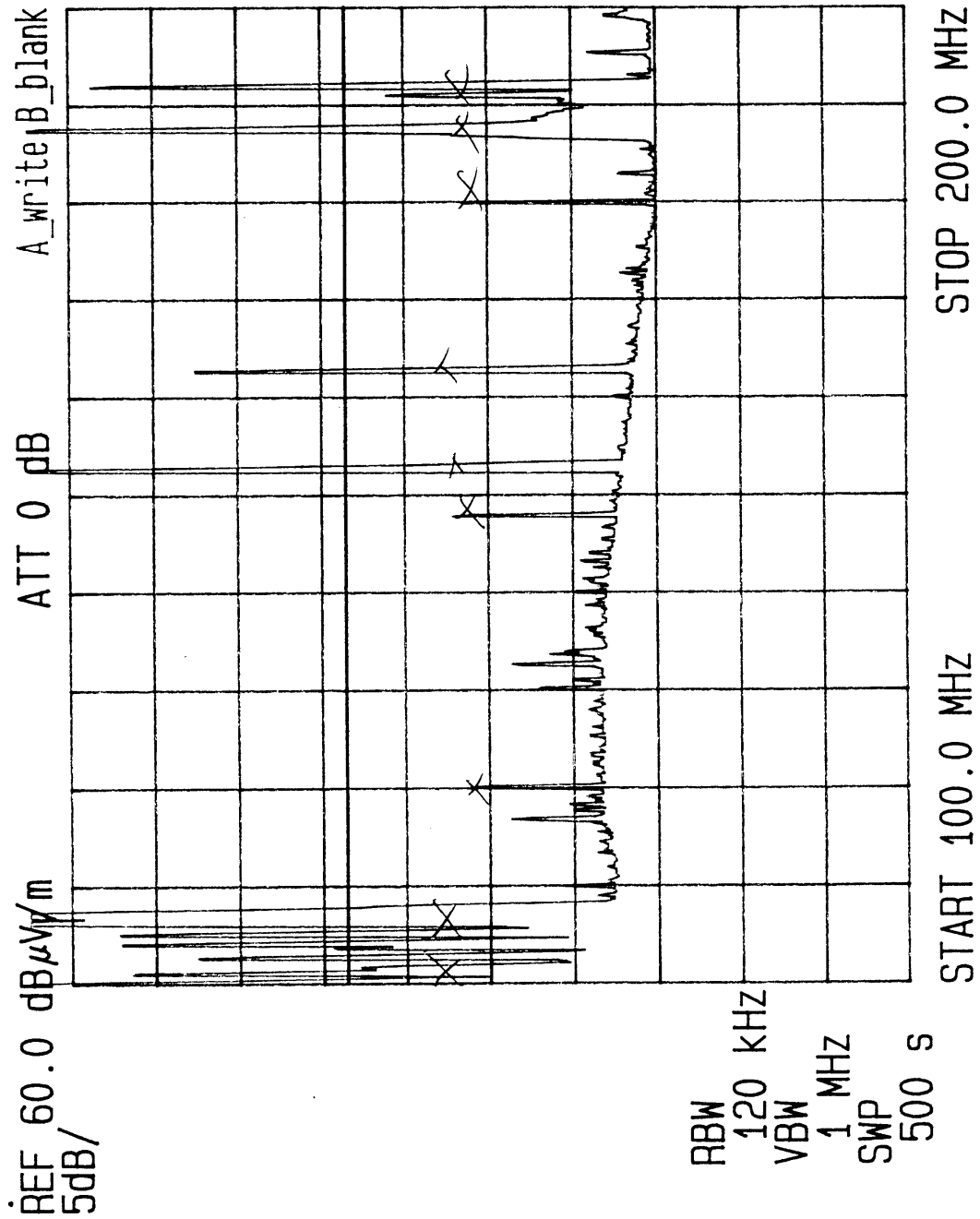
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DATA SHEET 6.3.2-3



TEST: FCC RADIATED EUT: Intersil PRISM II S/N: 9936-0027
FREQ: 100M-200MHz SPEC: 15.247 ANT.HT/POL: 1.8m H
DETECTOR: QUASI PEAK LINE UNDER TEST: N/A EUT POSITION: 180
DATE: 9-27-99 TEST SITE: 3 METER TESTER: AB



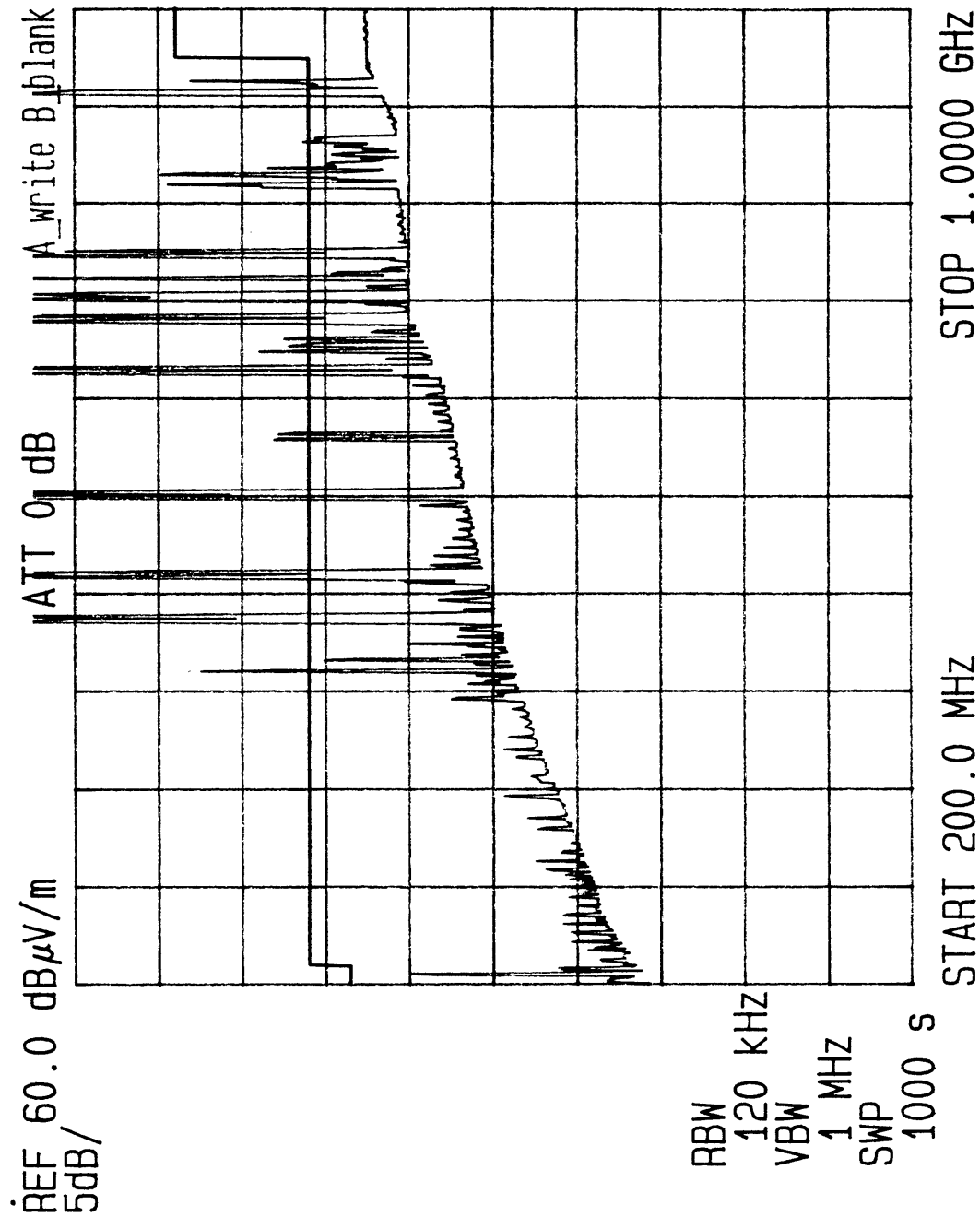
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DATA SHEET 6.3.2-4



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 200M-1GHZ	SPEC: 15.247	ANT. HT/POL: 1.5m H
DETECTOR: QUASI PEAK	LINE UNDER TEST: N/A	EUT POSITION: 180°
DATE: 9-28-99	TEST SITE: 3 METER	TESTER: <i>[Signature]</i>

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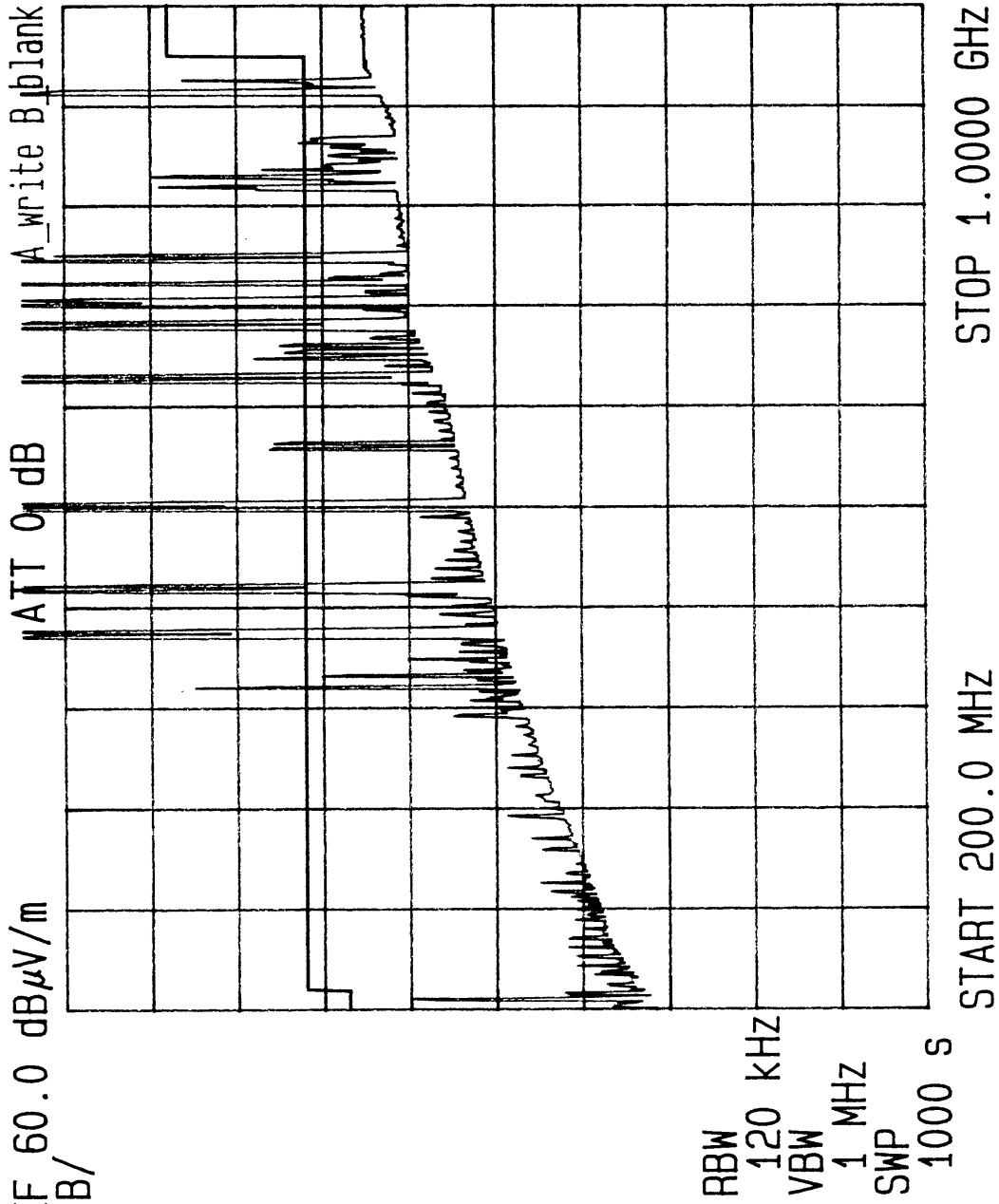


DATA SHEET 6.3.2-5



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 200M-1GHZ	SPEC: 15.247	ANT.HT/POL: 1.75m \ V
DETECTOR: QUASI PEAK	LINE UNDER TEST: N/A	EUT POSITION: 180°
DATE: 4-28-99	TEST SITE: 3 METER	TESTER: (signature)

REF 60.0 dBμV/m
5dB/



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DATA SHEET 6.3.2-6

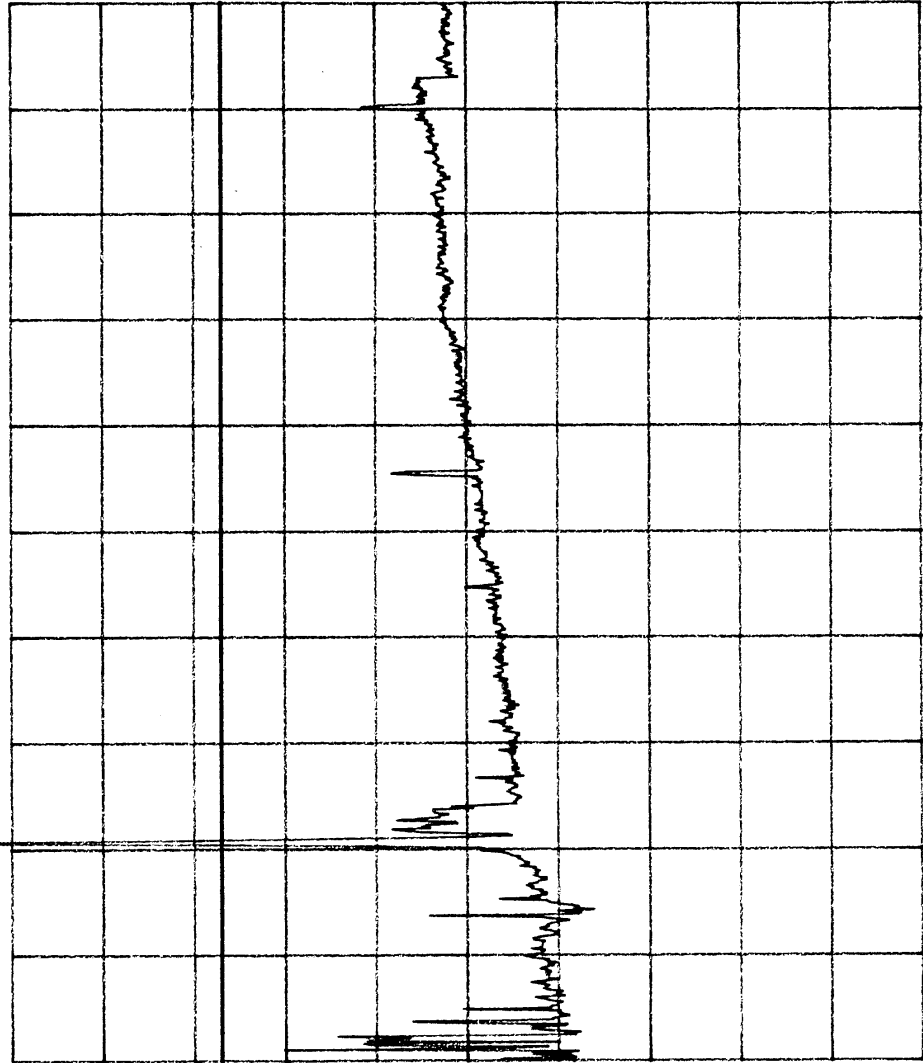


TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 1G-8GHz	SPEC: 15.247	ANT.HT/POL: 2.0m H
DETECT: PEAK	LINE UNDER TEST: N/A	EUT POSITION: 157'
DATE: 9-30-99	TEST SITE: 3 METER	TESTER: <i>QAB</i>

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



RBW 1 MHz
VBW 1 MHz
SWP 200 S

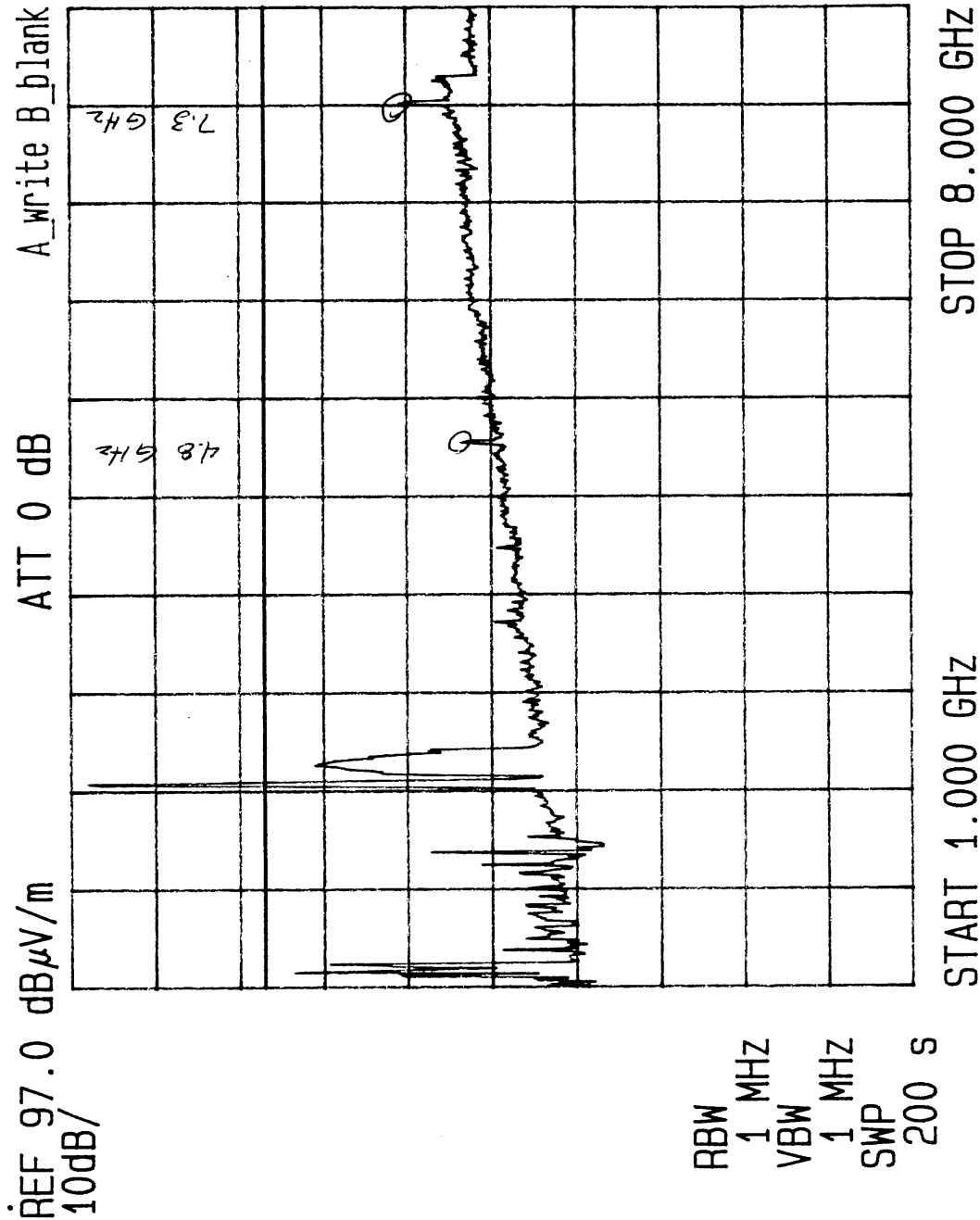
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DATA SHEET 6.3.2-7



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 1G-8GHz	SPEC: 15.247	ANT.HT/POL: 1.5m V
DETECT: PEAK	LINE UNDER TEST: N/A	EUT POSITION: 135°
DATE: 9-30-99	TEST SITE: 3 METER	TESTER: [Signature]

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DATA SHEET 6.3.2-8

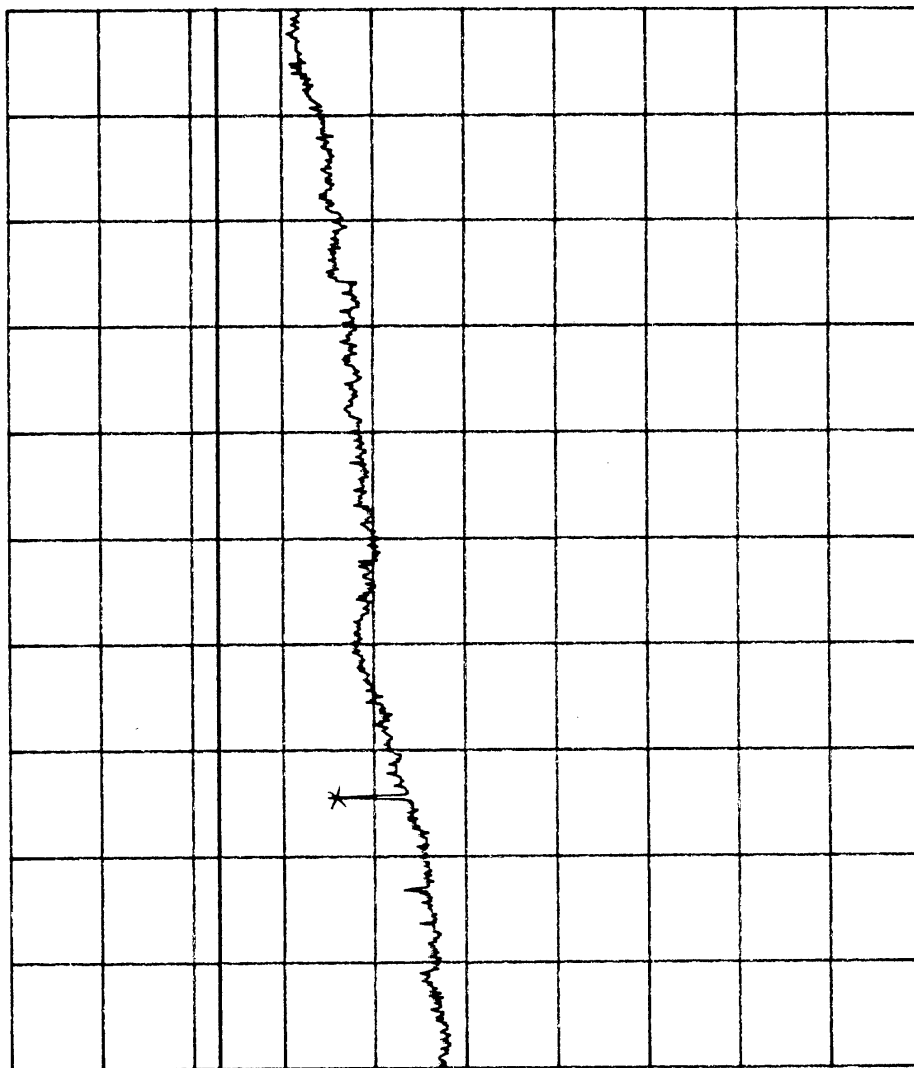


TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 8G-18GHz	SPEC: 15.247	ANT.HT/POL: 1.5m H
DETECT: PEAK	LINE UNDER TEST: N/A	EUT POSITION: 180
DATE: 9-30-99	TEST SITE: 3 METER	TESTER: AB

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



RBW 1 MHz
VBW 1 MHz
SWP 200 S

START 8.000 GHz

STOP 18.000 GHz

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DATA SHEET 6.3.2-9

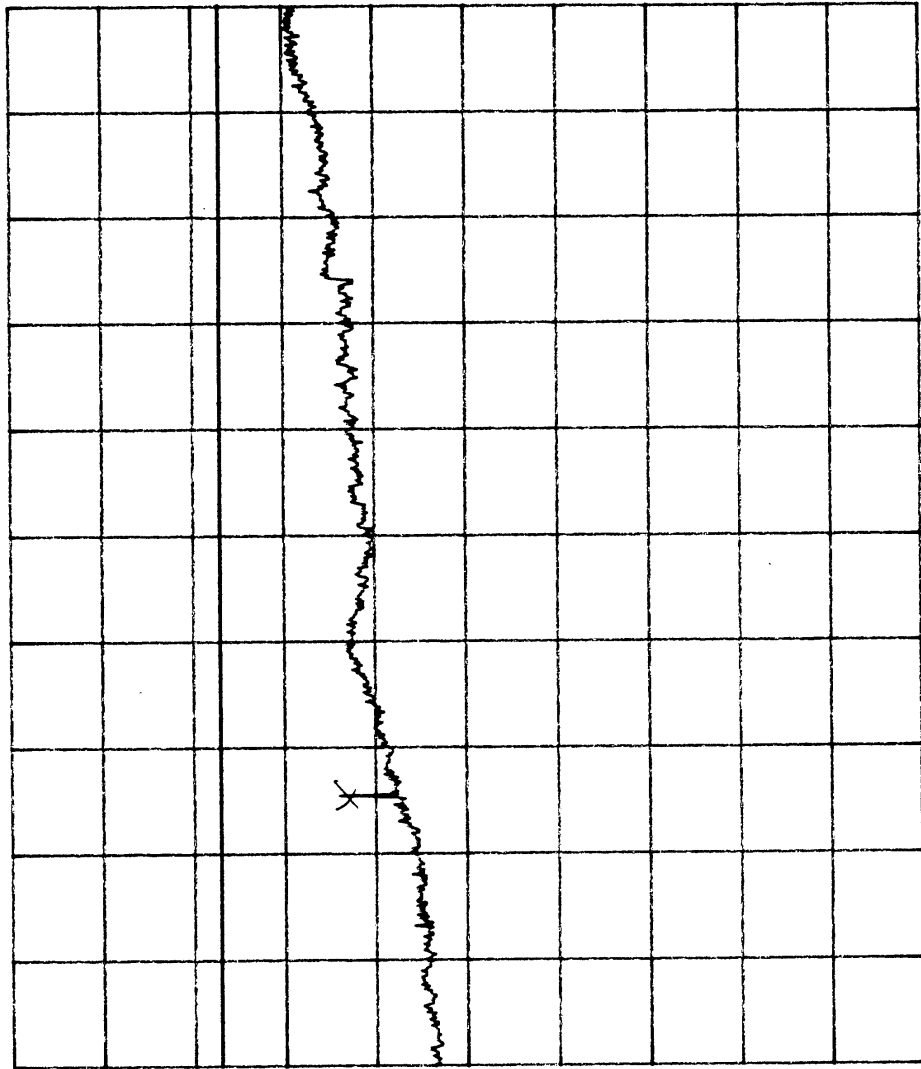


TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 8G-18GHZ	SPEC: 15.247	ANT.HT/POL: 1.75 V
DETECT: PEAK	LINE UNDER TEST: N/A	EUT POSITION: 180
DATE: 9-30-99	TEST SITE: 3 METER	TESTER: <i>[Signature]</i>

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



RBW 1 MHz
VBW 1 MHz
SWP 200 S

START 8.000 GHZ

STOP 18.000 GHZ

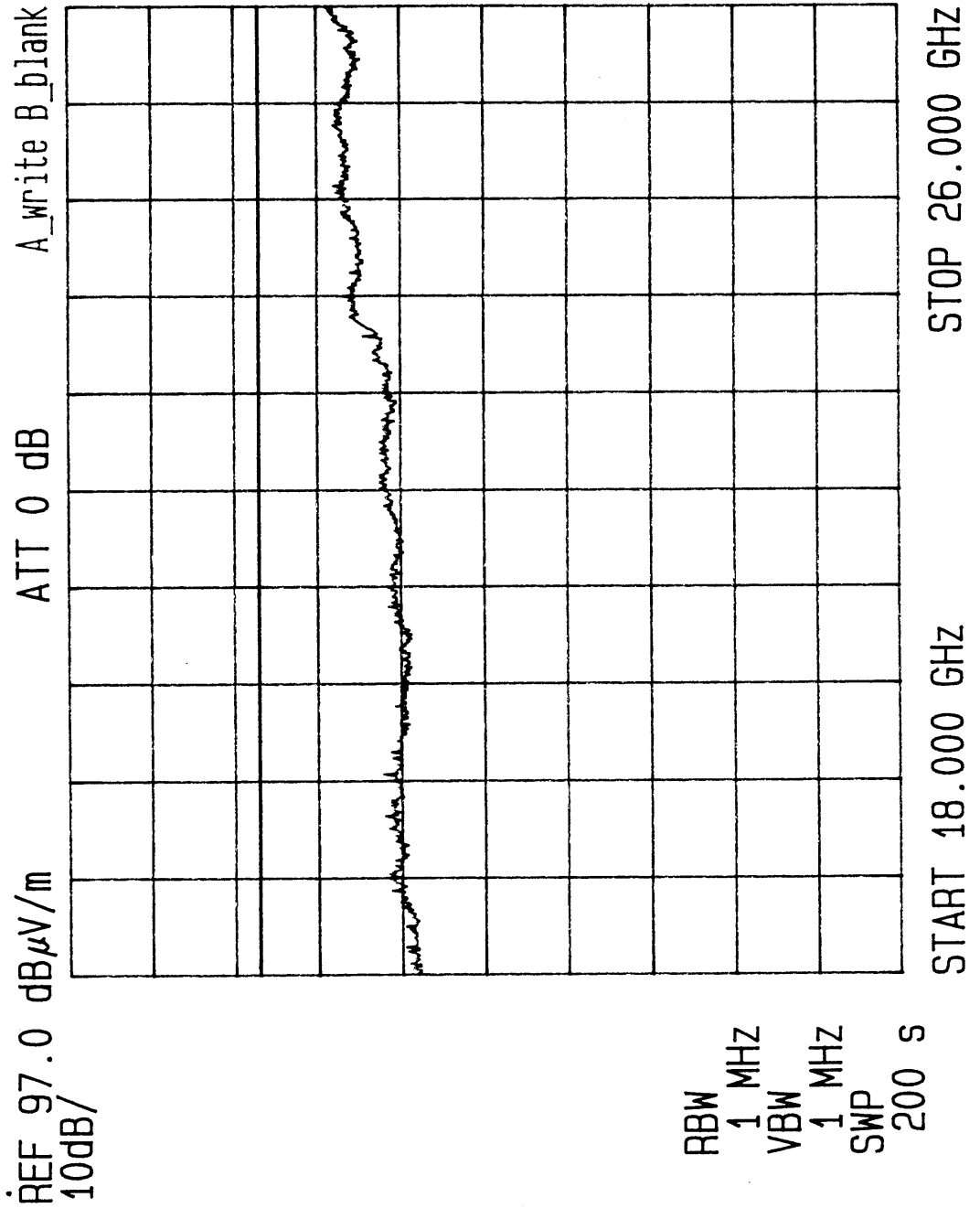
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DATA SHEET 6.3.2-10



TEST: FCC RADIATED EUT: Intersil PRISM II S/N: 9936-0027
FREQ: 18GHz-25GHz SPEC: 15.247 ANT.HT/POL: 1.5u H
DETECT: PEAK LINE UNDER TEST: N/A EUT POSITION: 182
DATE: 9-30-99 TEST SITE: 3 METER TESTER: *AB*

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DATA SHEET 6.3.2-11

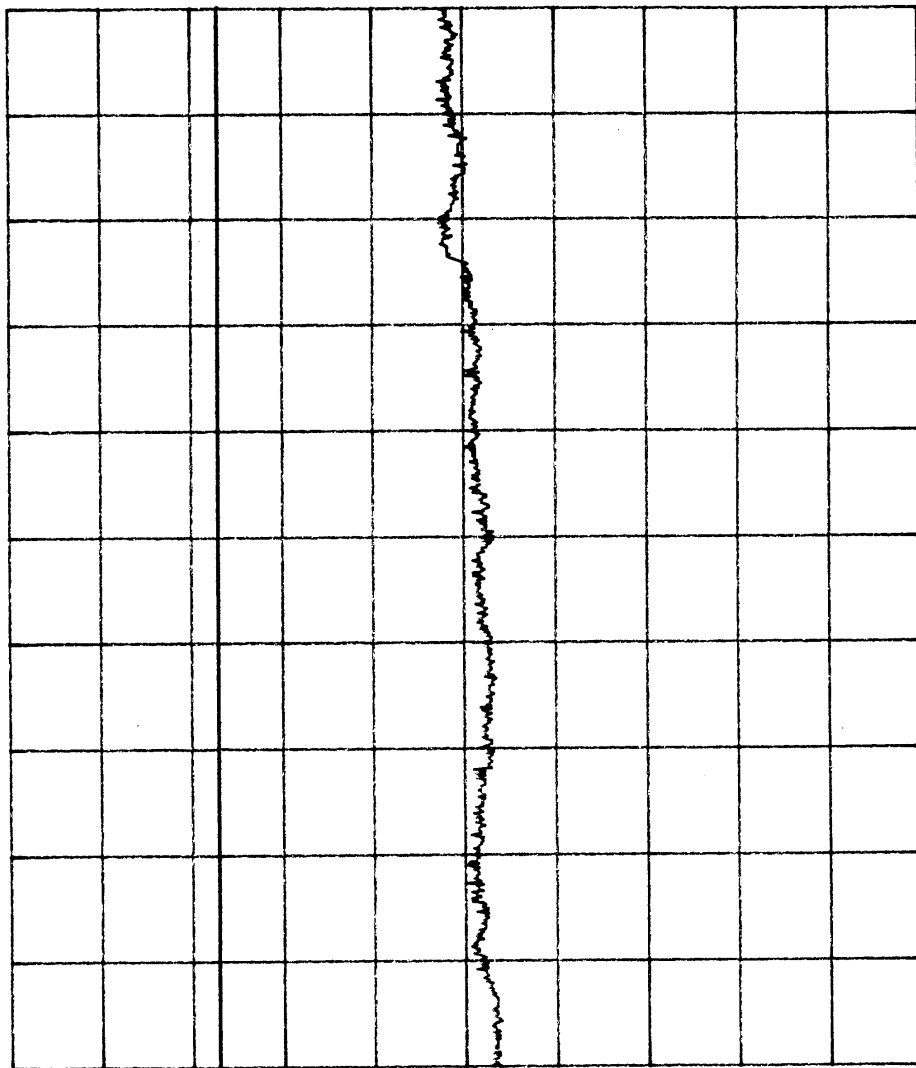


TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 18GHz-25GHz	SPEC: 15.247	ANT.HT/POL: 1.5m V
DETECT: PEAK	LINE UNDER TEST: N/A	EUT POSITION: 180°
DATE: 9-30-99	TEST SITE: 3 METER	TESTER: AB

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



RBW 1 MHz
VBW 1 MHz
SWP 200 S

START 18.000 GHz

STOP 25.000 GHz

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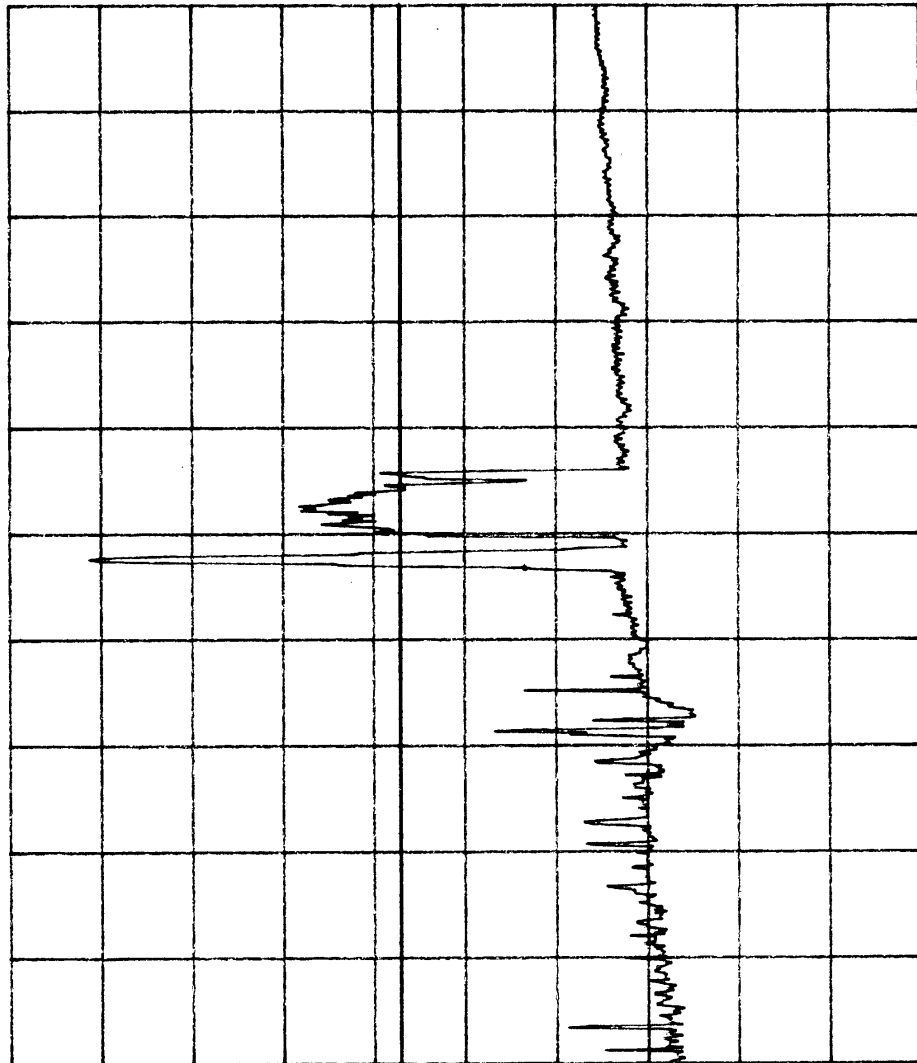


TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 1G-4GHz	SPEC: 15.247	ANT.HT/POL: 4.75m\ V
DETECT: AVERAGE	LINE UNDER TEST: N/A	EUT POSITION: / 55°
DATE: 9-30-99	TEST SITE: 3 METER	TESTER: <i>AB</i>

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



RBW 1 MHz
VBW 10 Hz
SWP 600 S

START 1.000 GHz

STOP 4.000 GHz

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DATA SHEET 6.3.2-13



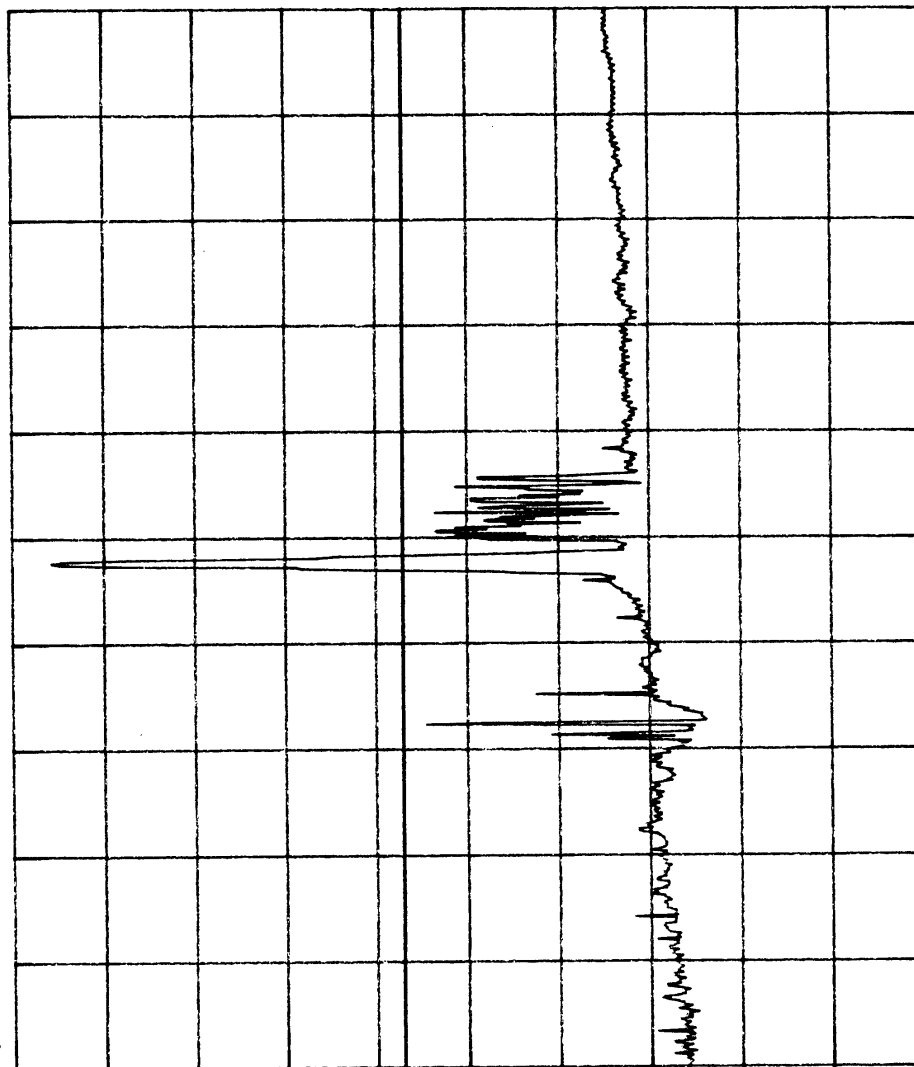
TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 1G-4GHZ	SPEC: 15.247	ANT.HT/POL: 1.75m H
DETECT: AVERAGE	LINE UNDER TEST: N/A	EUT POSITION: 112
DATE: 9-30-77	TEST SITE: 3 METER	TESTER: <i>[Signature]</i>

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REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



RBW 1 MHz
VBW 10 Hz
SWP 600 s

START 1.000 GHz

STOP 4.000 GHz

DATA SHEET 6.3.2-14

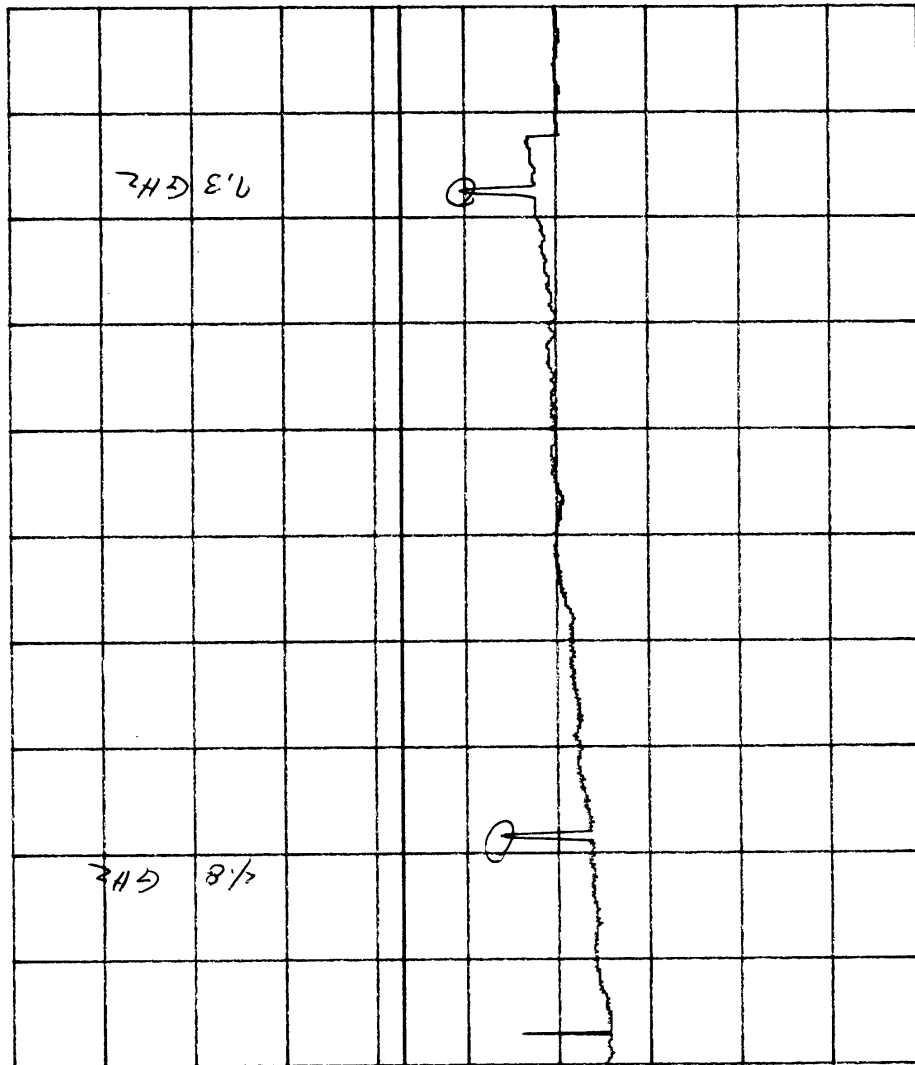


TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 4G-8GHz	SPEC: 15.247	ANT.HT/POL: 1.75 H
DETECT: AVERAGE	LINE UNDER TEST: N/A	EUT POSITION: 112°
DATE: 9-30-99	TEST SITE: 3 METER	TESTER: <i>AB</i>

REF 97.0 dBμV/m
10dB/

ATT 0 dB

A_write B_blank



RBW 1 MHz
VBW 10 Hz
SWP 800 S

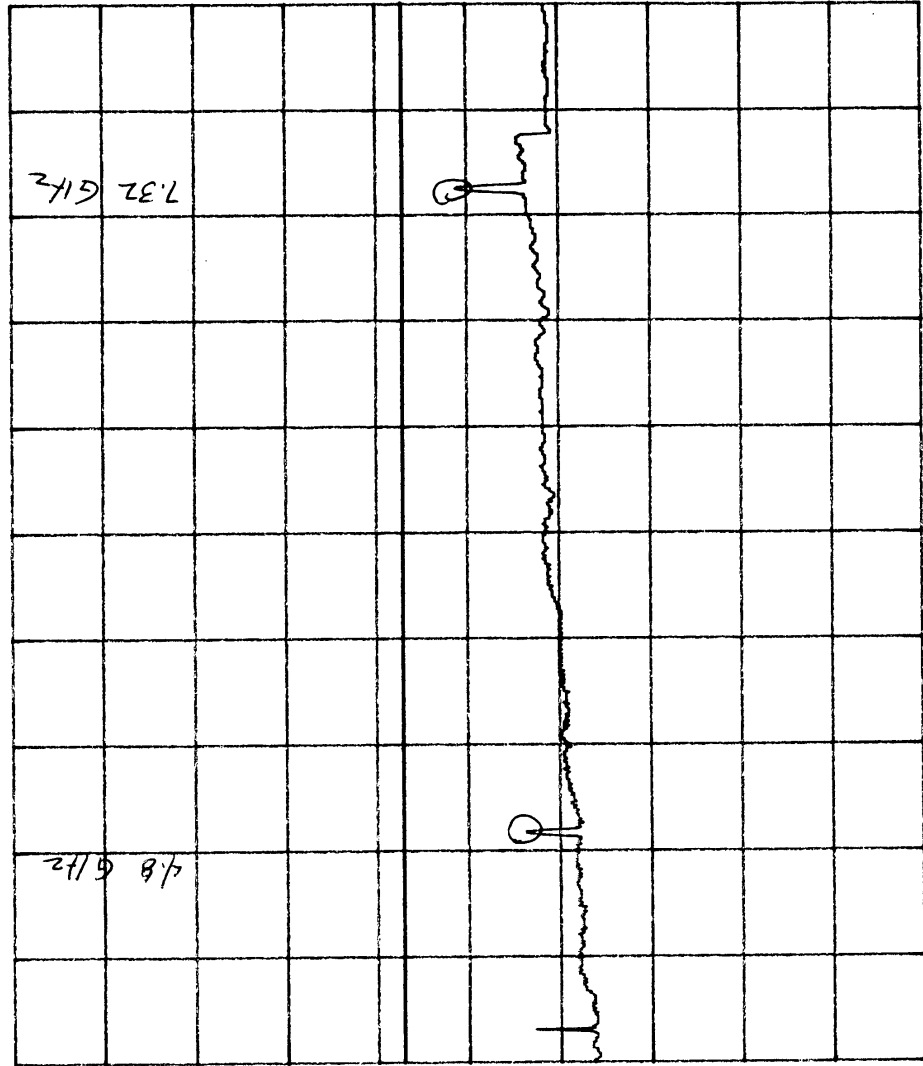
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DATA SHEET 6.3.2-15



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 4G-8GHZ	SPEC: 15.247	ANT.HT/POL: 1.75 V
DETECT: AVERAGE	LINE UNDER TEST: N/A	EUT POSITION: 35°
DATE: 9-30-99	TEST SITE: 3 METER	TESTER: <i>AD</i>

REF 97.0 dB μ V/m ATT 0 dB A_write B_blank
10dB/



RBW 1 MHz
VBW 10 Hz
SWP 800 S

START 4.000 GHZ STOP 8.000 GHZ

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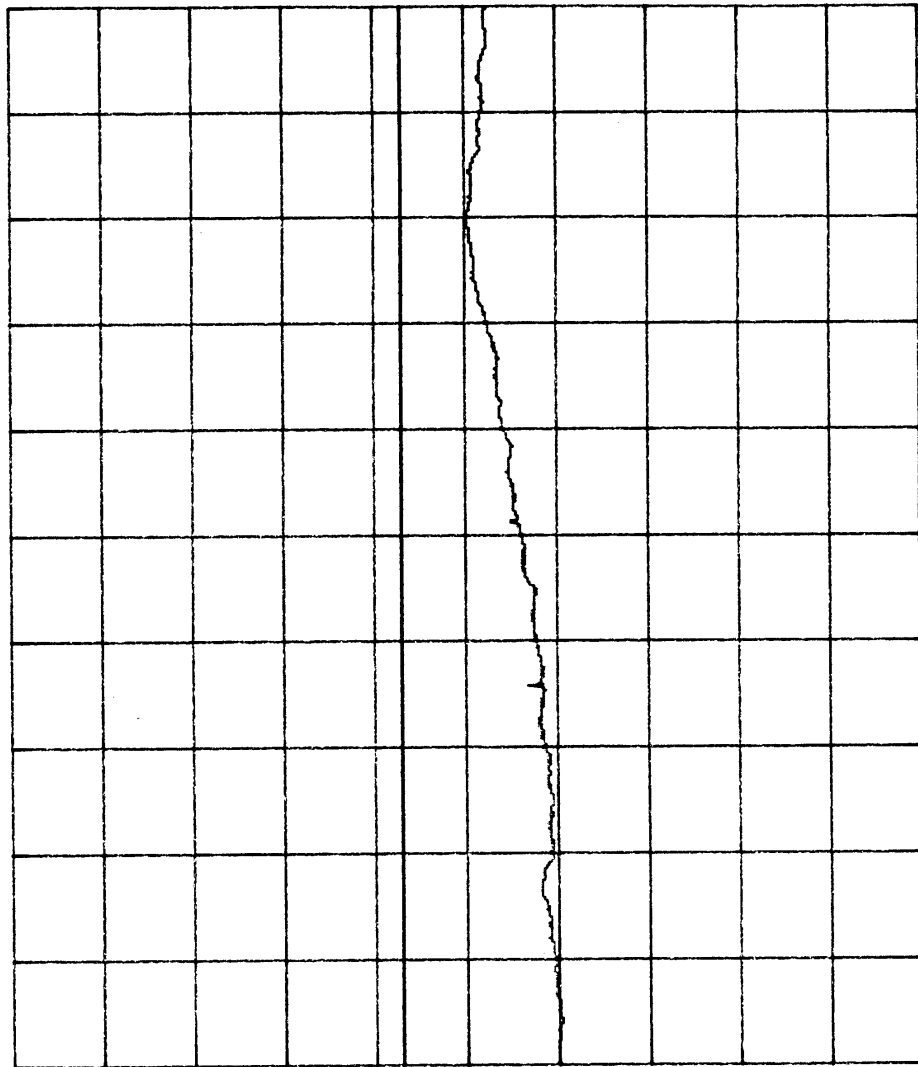


TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 8G-13GHz	SPEC: 15.247	ANT.HT/POL: 1.5m H
DETECT: AVERAGE	LINE UNDER TEST: N/A	EUT POSITION: 180
DATE: 9-29-99	TEST SITE: 3 METER	TESTER: AB

REF 97.0 dB μ V/m
10dB/

ATT 0 dB

A_write B_blank



RBW 1 MHz
VBW 10 Hz
SWP 1000 S

START 8.000 GHz

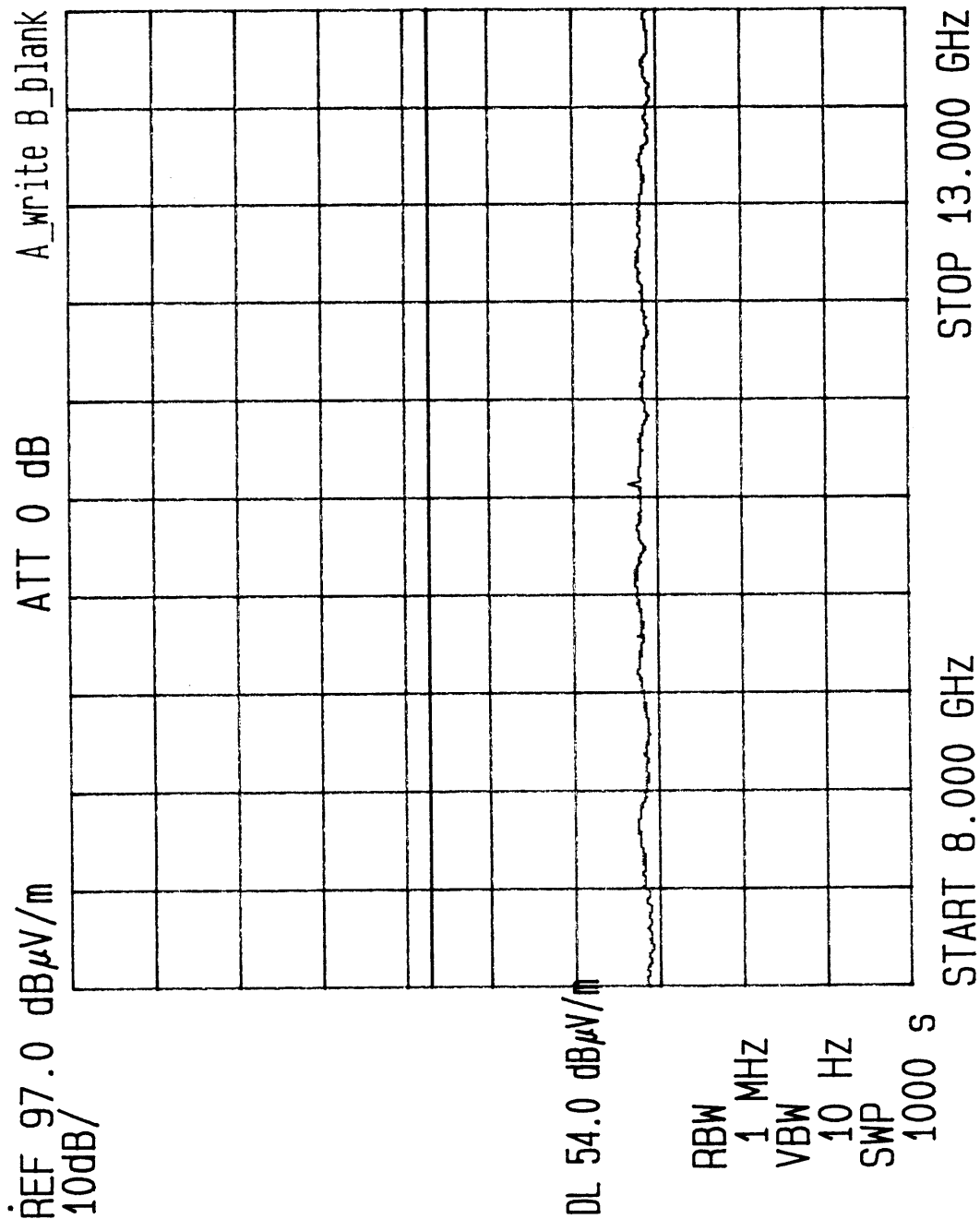
STOP 13.000 GHz

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TEST: FCC RADIATED EUT: Intersil PRISM II S/N: 9936-0027
FREQ: 8G-13GHz SPEC: 15.247 ANT.HT/POL: 1.75m V
DETECT: AVERAGE LINE UNDER TEST: N/A EUT POSITION: 180°
DATE: 9-29-99 TEST SITE: 3 METER TESTER: *AB*

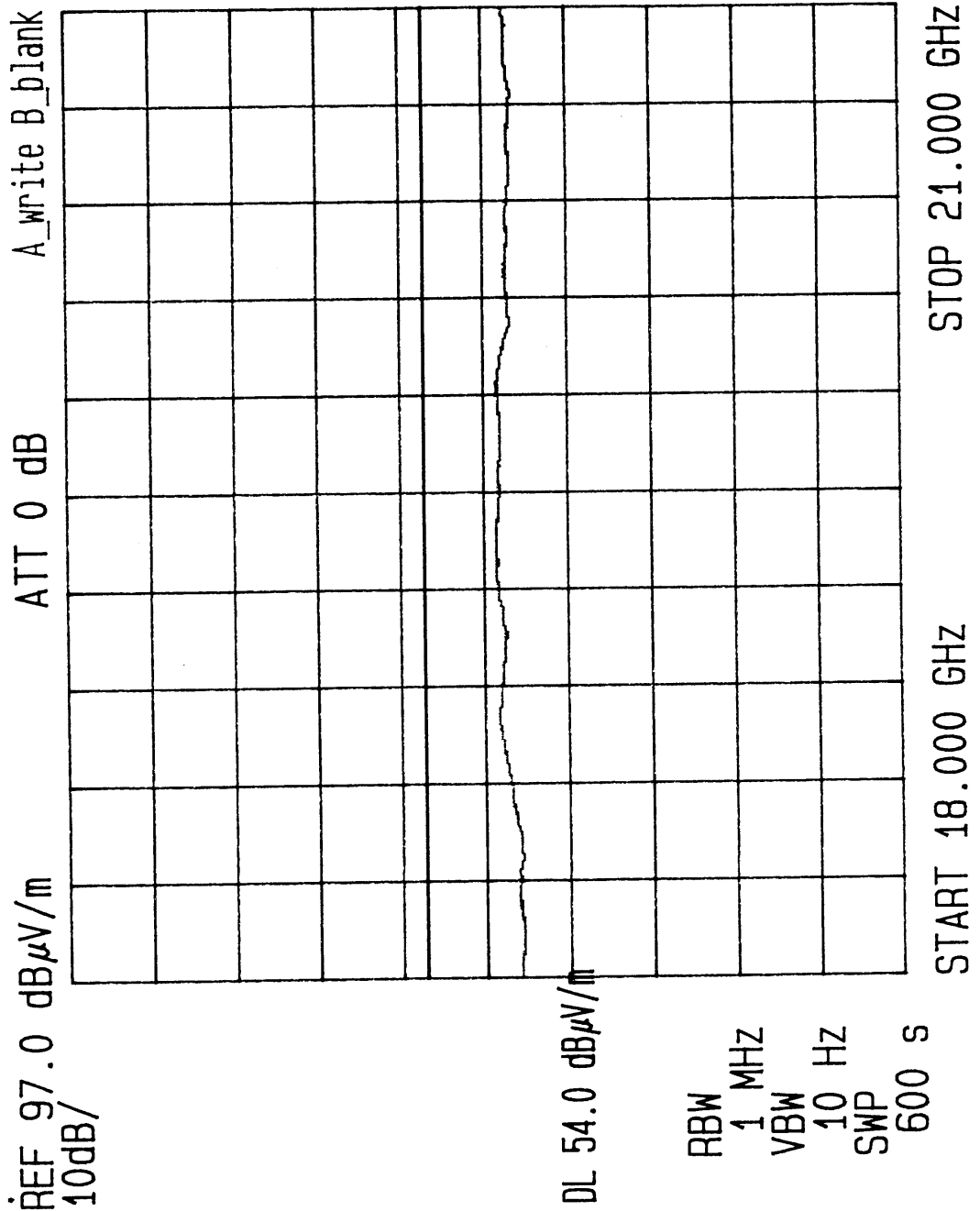
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DATA SHEET 6.3.2-18



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 13G-18GHZ	SPEC: 15.247	ANT.HT/POL: 1M/ H
DETECT: AVERAGE	LINE UNDER TEST: N/A	EUT POSITION: FRONT
DATE: 9-29-99	TEST SITE: 3 METER	TESTER: AB



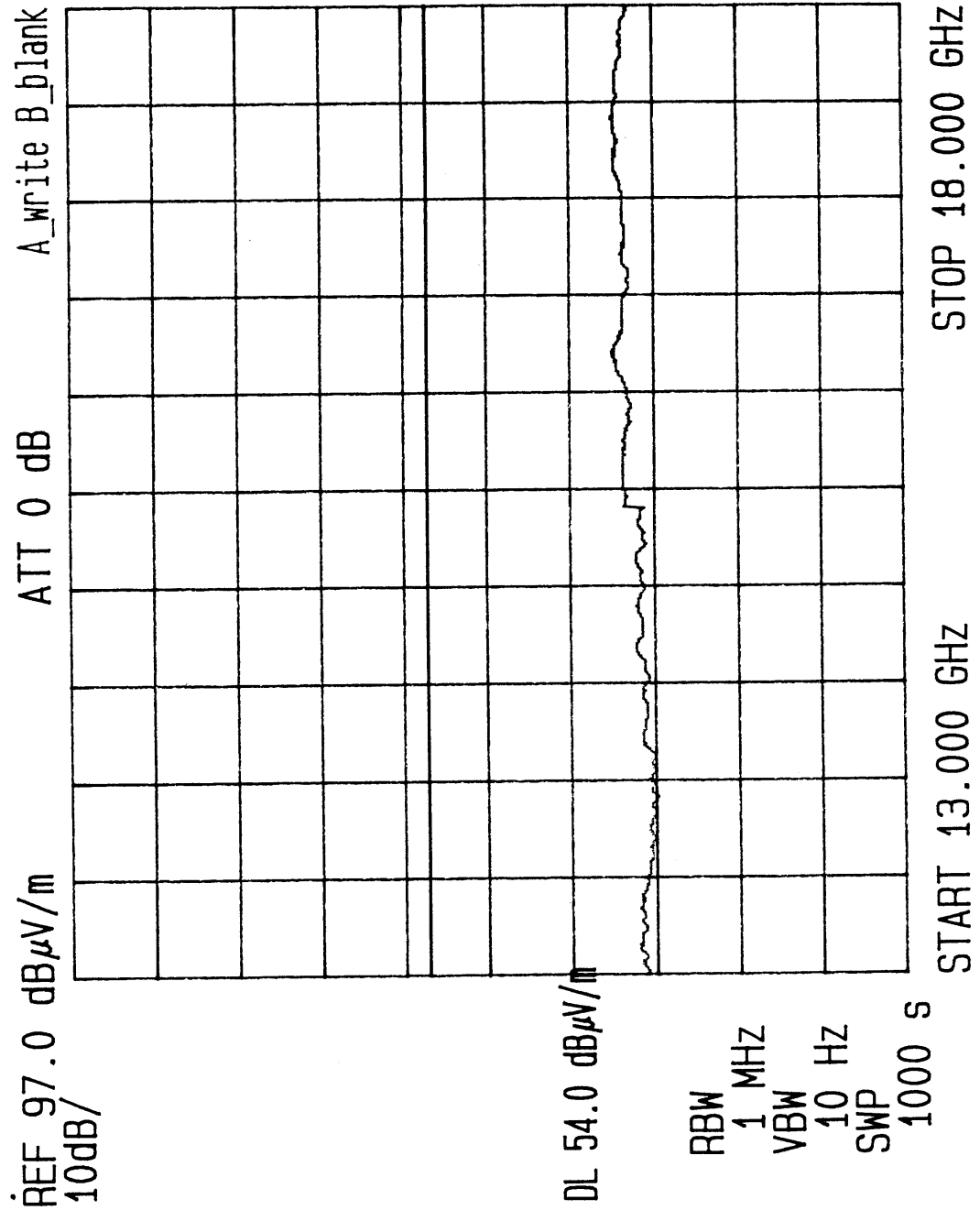
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DATA SHEET 6.3.2-19



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 13G-18GHz	SPEC: 15.247	ANT.HT/POL: 1M/ V
DETECT: AVERAGE	LINE UNDER TEST: N/A	EUT POSITION: FRONT
DATE: 9-29-97	TEST SITE: 3 METER	TESTER: <u>AB</u>

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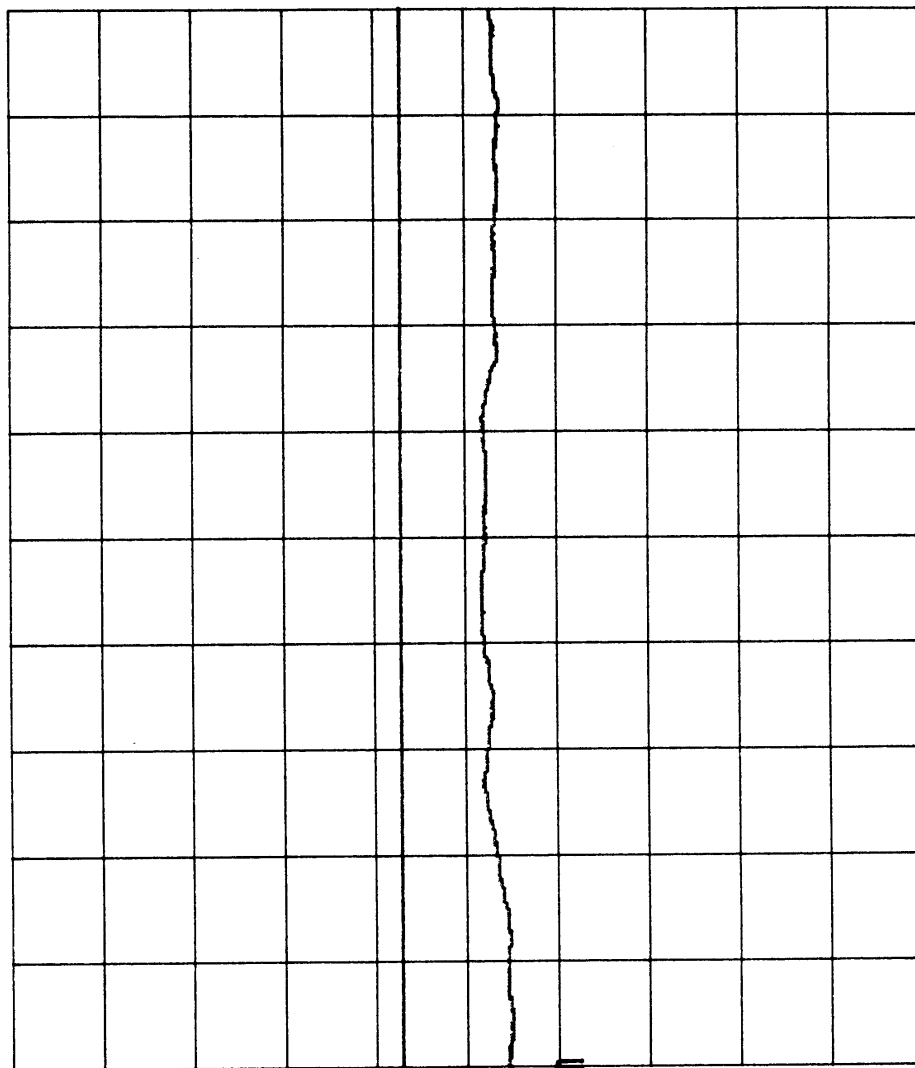


DATA SHEET 6.3.2-20



TEST: FCC RADIATED EUT: Intersil PRISM II S/N: 9936-0027
FREQ: 18G-21GHZ SPEC: 15.247 ANT.HT/POL: 1M/ H
DETECT: AVERAGE LINE UNDER TEST: N/A EUT POSITION: FRONT
DATE: 9-29-99 TEST SITE: 3 METER TESTER: *AB*

REF 97.0 dB μ V/m ATT 0 dB A_write B_blank
10dB/



DL 54.0 dB μ V/m

RBW 1 MHz
VBW 10 Hz
SWP 600 S

START 18.000 GHz STOP 21.000 GHz

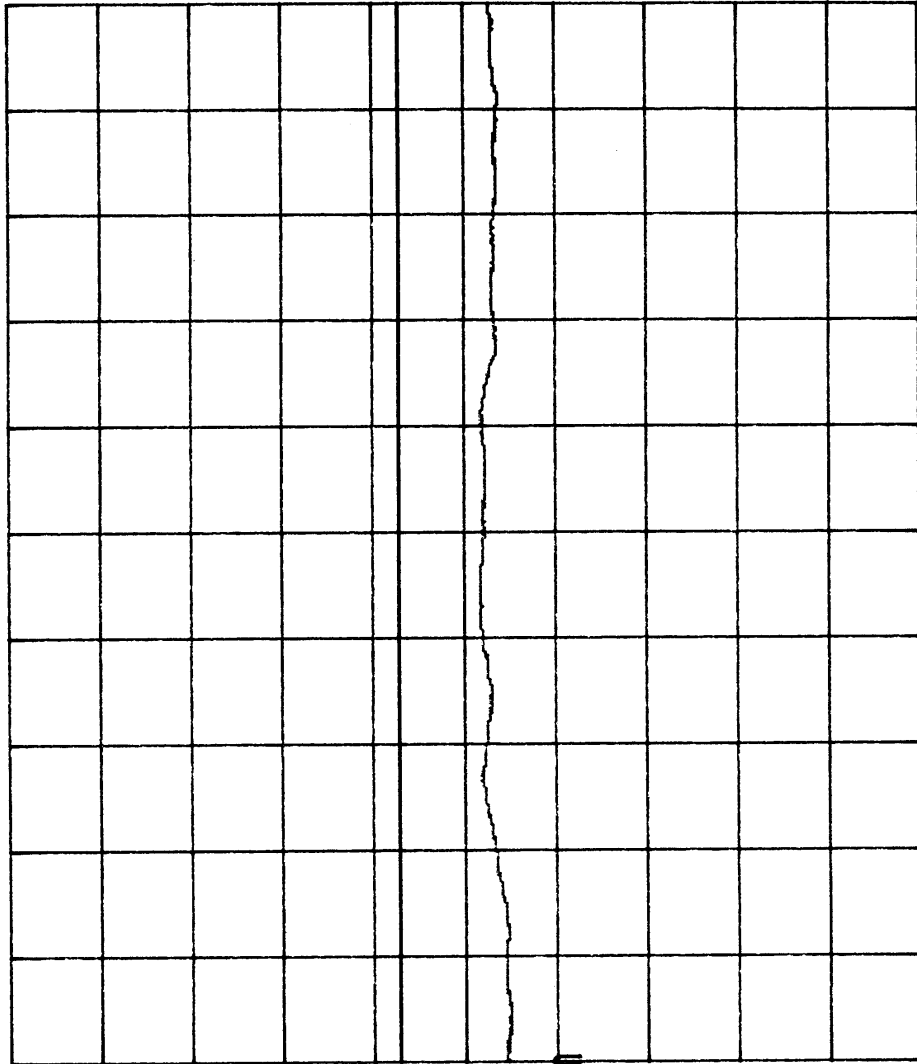
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DATA SHEET 6.3.2-21



TEST: FCC RADIATED EUT: Intersil PRISM II S/N: 9936-0027
FREQ: 18G-21GHz SPEC: 15.247 ANT.HT/POL: 1.5m V
DETECT: AVERAGE LINE UNDER TEST: N/A EUT POSITION: 100
DATE: 9-29-99 TEST SITE: 3 METER TESTER: AB

REF 97.0 dB μ V/m ATT 0 dB A write B blank
10dB/



DL 54.0 dB μ V/m

RBW 1 MHz
VBW 10 Hz
SWP 600 s

START 18.000 GHz STOP 21.000 GHz

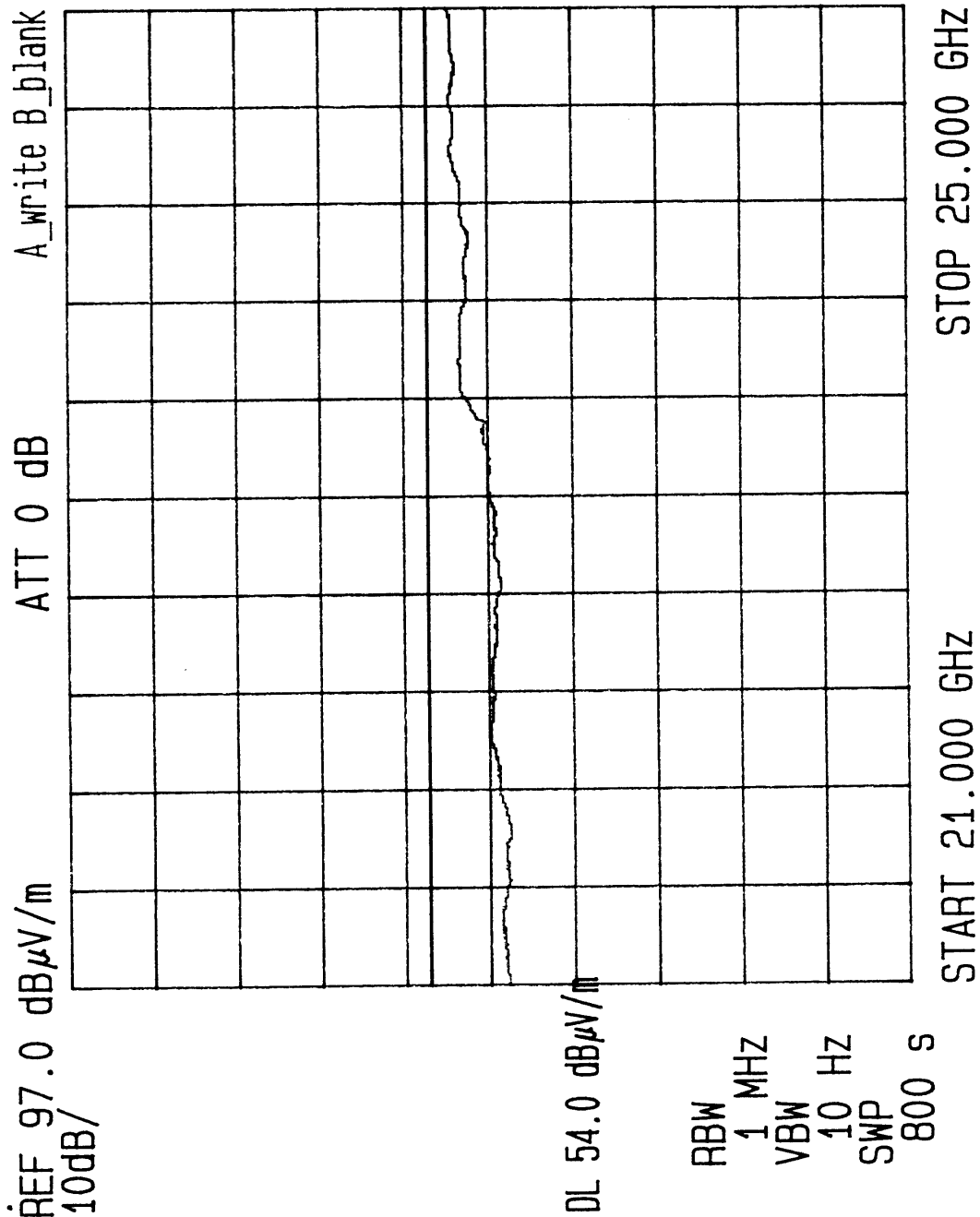
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DATA SHEET 6.3.2-22



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 21G-25GHz	SPEC: 15.247	ANT.HT/POL: 1M/ H
DETECT: AVERAGE	LINE UNDER TEST: N/A	EUT POSITION: FRONT
DATE: 9-29-99	TEST SITE: 3 METER	TESTER: <i>[Signature]</i>

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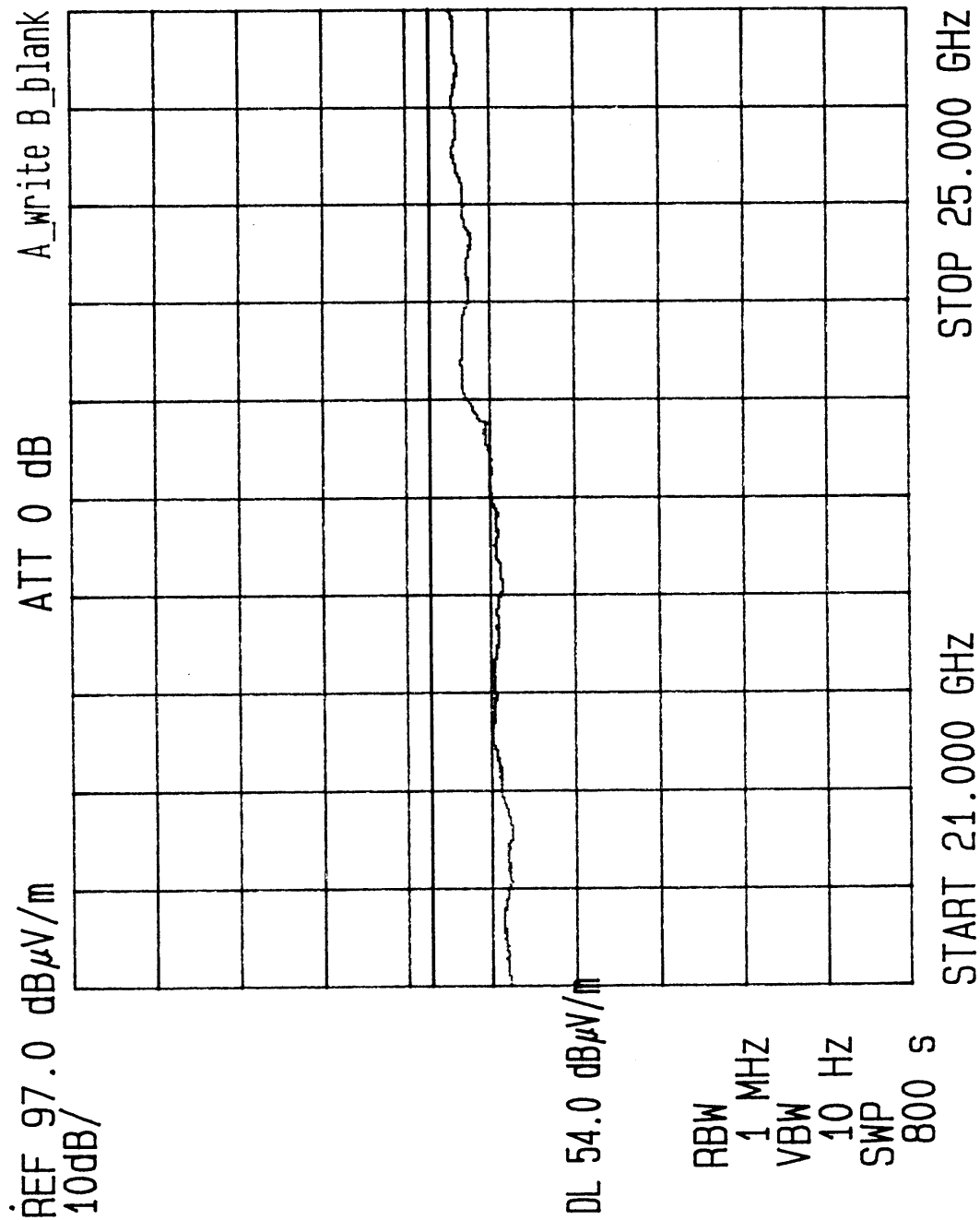


DATA SHEET 6.3.2-23



TEST: FCC RADIATED EUT: Intersil PRISM II S/N: 9936-0027
FREQ: 21G-25GHz SPEC: 15.247 ANT. HT/POL: 1.5m V
DETECT: AVERAGE LINE UNDER TEST: N/A EUT POSITION: Floor 7
DATE: 9-29-99 TEST SITE: 3 METER TESTER: *AB*

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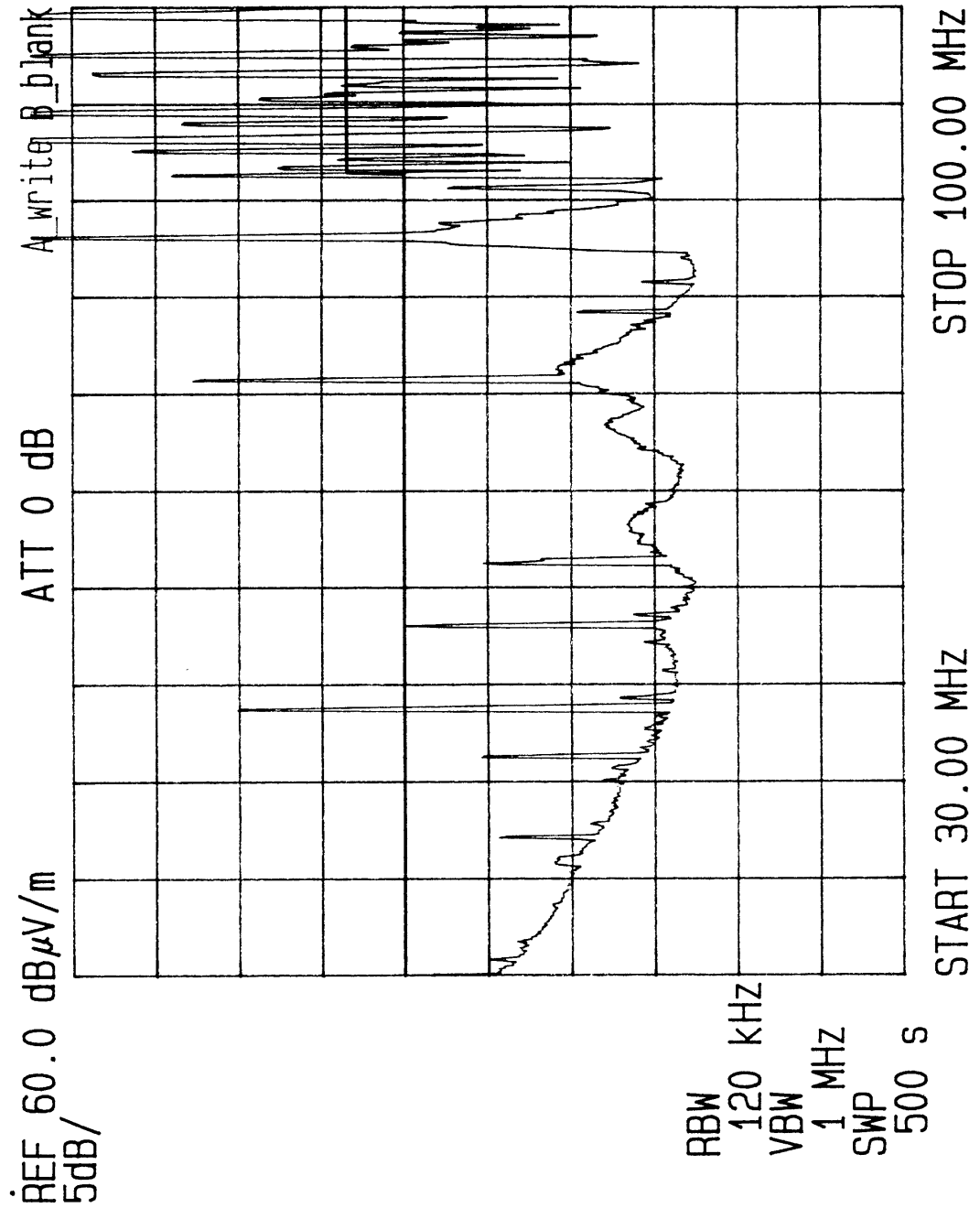


DATA SHEET 6.3.2-24



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 30M-100MHz	SPEC: 15.247	ANT. HT/POL: 1.5m H
DETECTOR: Q PEAK AMB.	LINE UNDER TEST: N/A	EUT POSITION: -
DATE: 9-27-99	TEST SITE: 3 METER	TESTER: <i>AB</i>

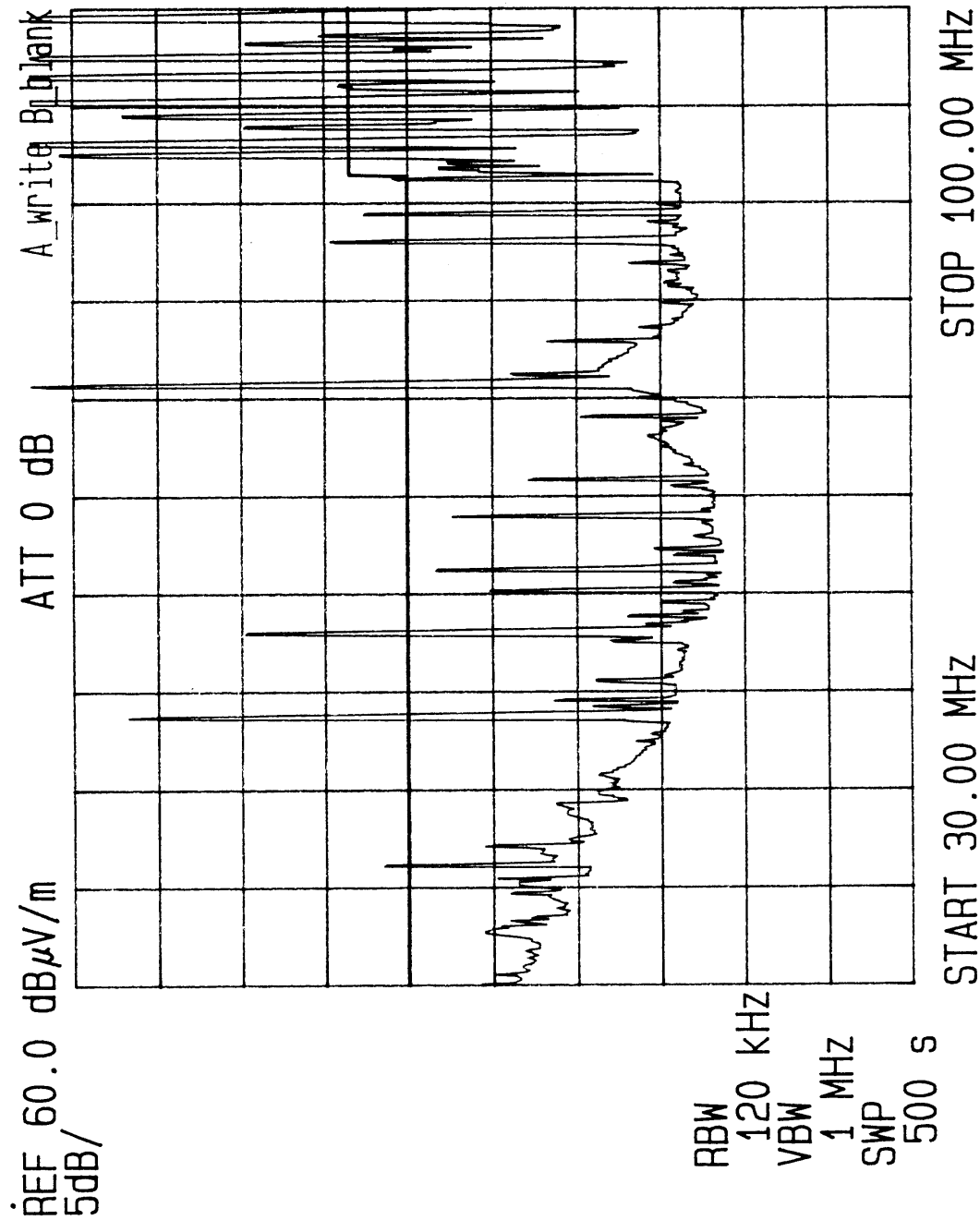
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DATA SHEET 6.3.3-1



TEST: FCC RADIATED EUT: Intersil PRISM II S/N: 9936-0027
FREQ: 30M-100MHz SPEC: 15.247 ANT.HT/POL: 1.75m V
DETECTOR: Q PEAK AMB. LINE UNDER TEST: N/A EUT POSITION: —
DATE: 9-27-99 TEST SITE: 3 METER TESTER: *AB*



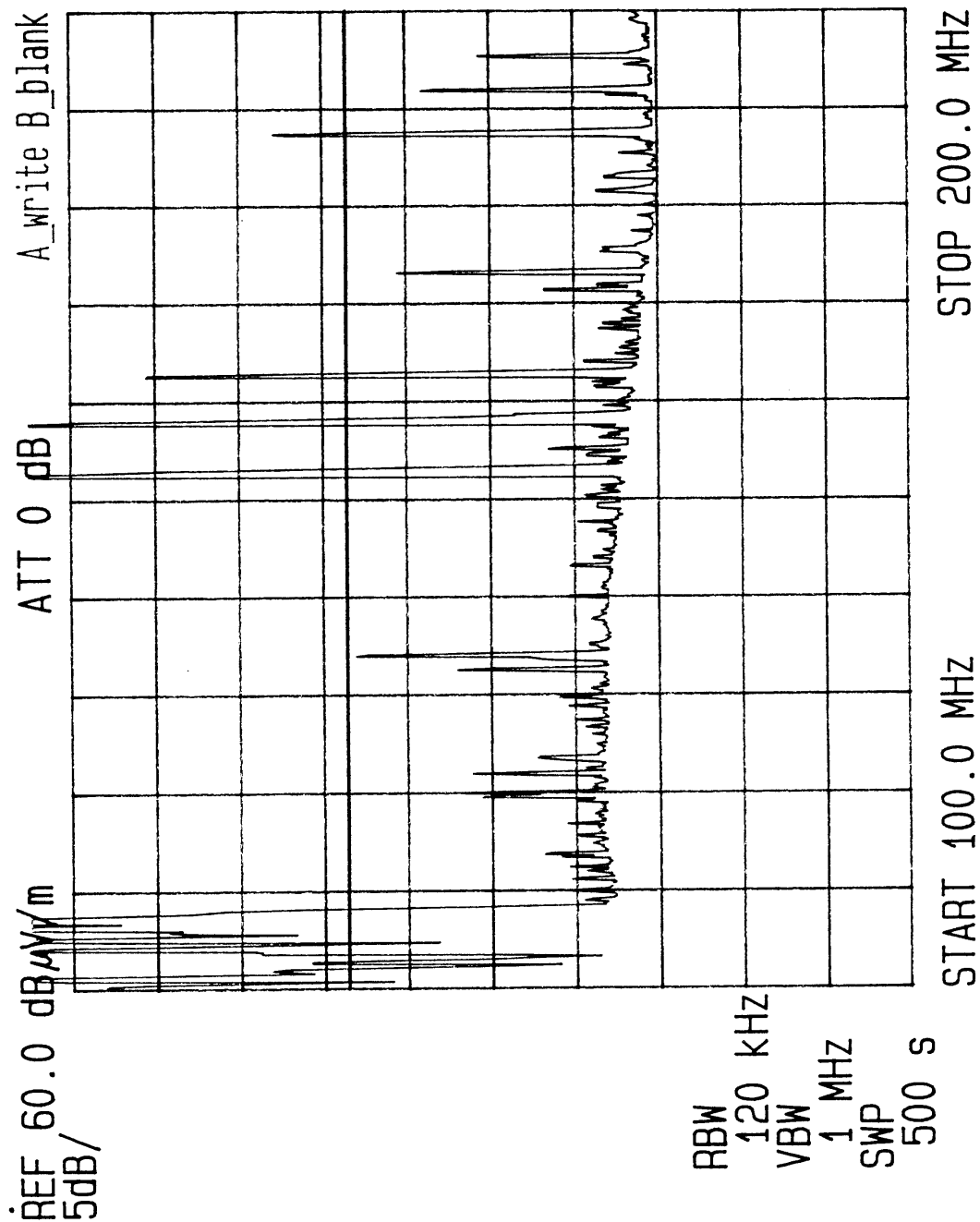
JA-1652

DATA SHEET 6.3.3-2



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 100M-200MHZ	SPEC: 15.247	ANT.HT/POL: 1.75m V
DETECTOR: Q PEAK AMB.	LINE UNDER TEST: N/A	EUT POSITION: ~
DATE: 9-27-99	TEST SITE: 3 METER	TESTER: AB

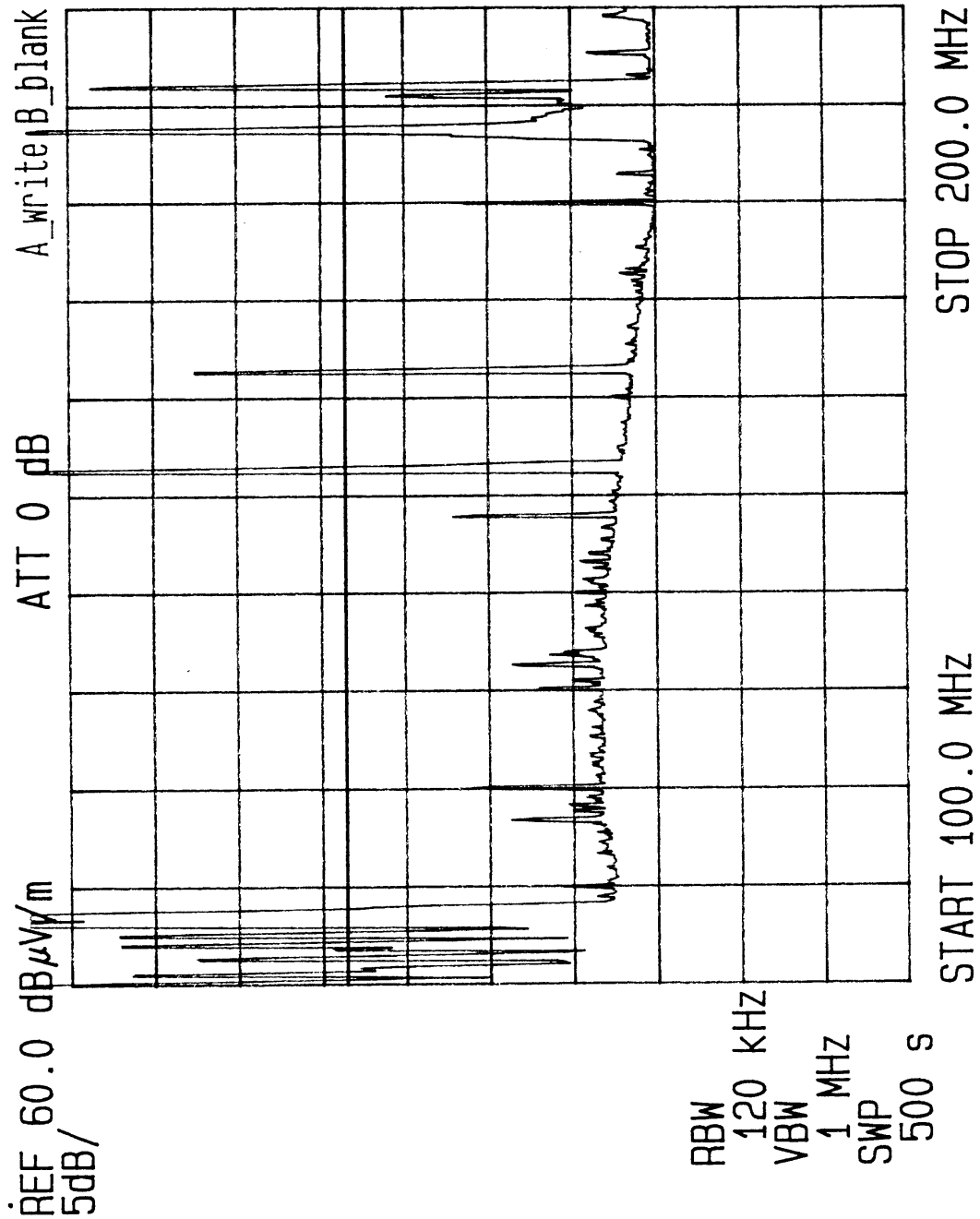
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DATA SHEET 6.3.3-3



TEST: FCC RADIATED EUT: Intersil PRISM II S/N: 9936-0027
FREQ: 100M-200MHZ SPEC: 15.247 ANT.HT/POL: 1.5m H
DETECTOR: Q PEAK AMB. LINE UNDER TEST: N/A EUT POSITION: 180°
DATE: 9-27-99 TEST SITE: 3 METER TESTER: *AB*



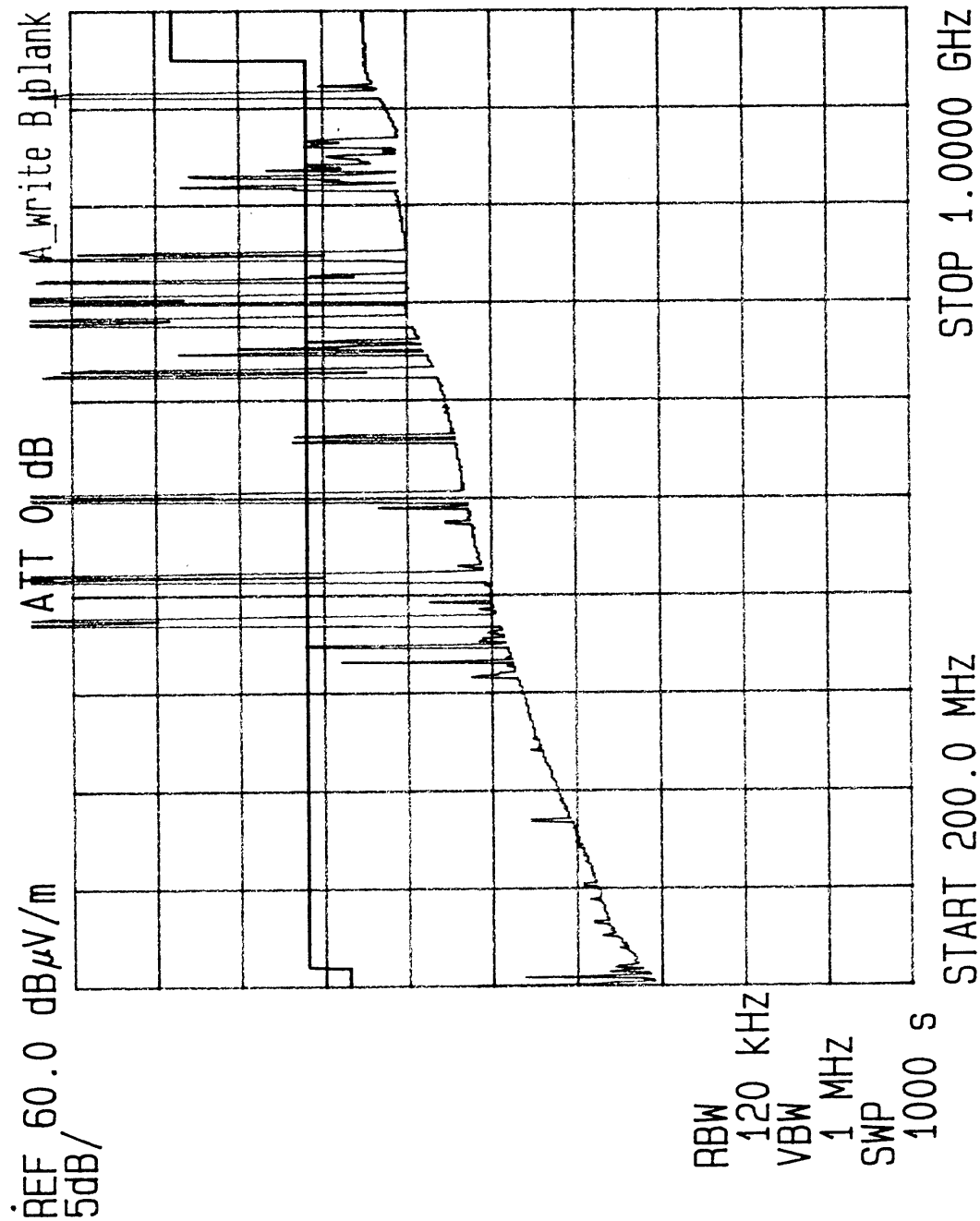
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DATA SHEET 6.3.3-4



TEST: FCC RADIATED	EUT: Intersil PRISM II	S/N: 9936-0027
FREQ: 200M-1GHZ	SPEC: 15.247	ANT.HT/POL: 1.5m\ H
DETECTOR: Q PEAK AMB.	LINE UNDER TEST: N/A	EUT POSITION: -
DATE: 9-28-99	TEST SITE: 3 METER	TESTER: <i>AB</i>

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DATA SHEET 6.3.3-5